

BUILDING 865 CLUSTER

HISTORICAL SITE ASSESSMENT (HSA)

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1.0 INTRODUCTION

This Historical Site Assessment (HSA) is intended to provide a summary of the historical operations, building descriptions, as well as an overview of the facility contamination history. Much of the Building 865's process history and the physical descriptions were obtained from the Historical Release Report (EG&G, 1994) and the Draft Safety Analysis Report (EG&G, 1982). Other sources of information were the Building WSRIC, Site Master List of RCRA Units and the Site IHSS, PAC, and UBC databases.

The individual Subject Matter Experts (SMEs) should evaluate/verify the information during the RLC/PDS process. The SMEs may need to review additional documents and perform additional interviews.

This HSA was performed prior to SME walkdowns, and chemical and radiological characterization package preparations. Information contained in this HSA only represents a "snapshot" in time. Subsequent data may be obtained during SME walkdowns and chemical and radiological characterization package preparations, which may conflict with this report. However, this report will not be amended, and the newer data will take precedence over the data in the report. Newer Data will appear in the RLCR/PDSR.

Building 865 was constructed in 1970 as a research and development facility for non-plutonium metals and is an anticipated type 1 facility. It is a one-story, rectangular structure, made of pre-cast concrete twin-tee panels and concrete blocks that was divided into two areas built on an on-grade concrete slab. The north side has offices, metallurgical laboratory, machine shop, maintenance shop, utility room, and locker/shower and restroom facilities. The south side is a high-bay area that houses the metalworking operations. In the early 1980s an addition was added to the original building on the east side of the high-bay, which was used to store classified molds and metal-forming dies and parts.

The most common metals that were examined and worked with were depleted uranium, stainless steel, and aluminum. Special metals that were also worked were beryllium, copper, gold, iridium, molybdenum, niobium, platinum, silver, tantalum, titanium, tungsten, vanadium, and alloys of these metals.

Metalworking operations consisted of arc and vacuum induction melting, hammer forging, hot and cold isostatic pressing, hydrospinning, swaging, extruding, drawing, rolling, furnace heat treating in vacuum and inert atmosphere, salt bath heating for forming, glovebox operations, cutting, and shearing.

Standard machining operations were carried out using lathes, milling machines, surface grinders, drill presses, sawing, specialized tracer equipped lathes, and milling machines.

Metallurgical tests performed in the laboratory included testing of the tensile properties of metals at room, elevated, and low temperatures, hardness, and macroscopic and microscopic examination of metals and alloys

Support buildings associated with Building 865 are

- Building 827, The emergency generator facility -This is an anticipated Type 1 facility,
- Building C865, The cooling tower - This is an anticipated Type 1 facility,
- Building 866, The waste transfer station - This is an anticipated Type 1 facility,
- Building 867, The upgraded exhaust plenum - This is an anticipated Type 2 facility,
- Building 868, The upgraded exhaust plenum - This is an anticipated Type 2 facility

Support tanks associated with Building 865 are

- TK 25 - New diesel tank - This is an anticipated Type 1 facility
- Tanks 010 - Underground diesel storage tank- closed - This is an anticipated Type 2 facility

The Building 865 support facilities and support tanks will be discussed in more detail below

2.0 PHYSICAL DESCRIPTION OF BUILDING 865

2.1 General Construction and Foundation

Building 865 is a one-story structure divided into two sections the south section and the north section. The south section is a high-bay area, which is a 34-foot high and 152-foot square structure. The high-bay area is constructed of pre-stressed concrete twin-tee panels, pre-cast columns, and T-beams. A 30-foot by 75-foot mezzanine supports the supply ventilation equipment, caustic scrubber for acid gases from hoods, and the air sampler vacuum pump. The floor, which is six-inch-thick reinforced-concrete, is supported by steel framing on steel columns.

The north wall of the high-bay area acts as a fire barrier between the high-bay and the north section, and has 8-inch-thick fire resistant panels attached to the concrete twin-tee walls.

The north section is 17-foot high, 82-foot wide and 152-foot long. The walls are constructed of reinforced-concrete block.

The foundation is constructed of reinforced, cast-in-place concrete piles and concrete grade beams supporting the twin-tee panel walls and pre-cast support columns. The piles

are 2 to 3 feet in diameter and 7 to 26 feet deep with the bottoms belled out at the bottom. The piles are placed approximately 4 feet into the bedrock.

In early the 1980s, an addition was added to the east side of the original structure. This addition that was used for general storage and to add a new receiving dock.

2.2 Walls

Exterior walls of the high-bay area are pre-cast, pre-stressed, concrete twin-tee construction. The office-laboratory area is constructed of 8-inch-thick concrete blocks. The east addition has exterior walls constructed of steel-beam framing with steel-panel walls. The new dock area is constructed of 6-inch concrete blocks.

The interior walls are primarily constructed of gypsum board with metal studs. The locker room and restrooms have ceramic tile wainscoting approximately six feet high.

The arc furnace has 9-inch-thick, poured-in-place, reinforced-concrete walls surrounding around it. The hot isostatic press has concrete block walls surrounding it. The cold isostatic press has 6-inch-thick reinforced-concrete wall surrounding it. The electrorefining cell, in the southwest corner of the high-bay, had a wall constructed of gypsum board and metal stud built around it.

The walls of the high-bay are insulated with three-inch-thick fiberglass insulation held in place with three-inch-wide, 1/4-inch-thick, black-iron straps bolted to the walls. The walls have a fiberboard wainscoting 6-foot high to protect the insulation from being damaged. The walls in the east addition are not insulated.

2.3 Floors

The ground floor is an on-grade, 6-inch-thick, reinforced concrete slab. The floors in the offices, hallways and the laboratory are covered with vinyl-asbestos tile. Some floors in the offices, hallways and part of the lunch-break room have carpet laid down over the vinyl-asbestos tiles.

The floor for the mezzanine is a 6-inch-thick, reinforced concrete slab. The floors in the high-bay, machine shop, and the maintenance shops are sealed with a concrete sealer and then painted. The floor of the mezzanine is sealed with a concrete sealer.

Floors in the lavatories, locker rooms, and shower rooms are tiled with 1-inch-square ceramic tile.

When the isostatic presses were installed, the original floor in the high-bay was removed, and a new reinforced floor was poured to support them. The base under the presses is two feet thick, and the area under the walls is one-foot thick.

There were two waste tanks located in the sump in the floor slab along the north wall of the high-bay area. These sumps contained two tanks designed to collect process wastes.

from the metalworking, metallurgy, and machining operations. One of the tanks was never used. These tanks were removed after the construction of the waste transfer station, Building 866. These tanks are identified as RCRA unit 40 46 and 40 47 in the list of RCRA units in section 13 3. See section 3 0, subsection "Process Waste System" for additional information.

2.4 Ceilings

The offices, halls, laboratories, and lunch-break room have suspended acoustical tile ceilings. Locker rooms and restrooms ceilings are suspended metal laths covered with cement plaster. The rest of the building ceilings are the unfinished side of the twin-tee concrete roof panels.

2.5 Roof

The roof on the original building is made of 2-inch-thick concrete poured on top of pre-stressed concrete twin-tee slabs. The roof has 1-inch-thick urethane foam insulation finished with neoprene roofing material. The east addition has metal decking on top of the steel framing.

The roof has a ridgeline at the center for drainage and is pitched to the east and west. Roof drains discharge to the ground through downspouts, and the water is diverted away from the building to the plant's surface water discharge system.

2.6 Doors

There are 10 personnel doors leading into the building as well as numerous interior doors. The main entrance to the building is on the east side of the office-laboratory section. The main entrance has double swing-out doors and is set in aluminum frames with safety glass panels. All other doors are hollow metal. Some are insulated, some have wire-reinforced glass panels, and a few have louvers in them. Some of the doors in the offices have see-through panels of translucent plastic. There are two steel roll-up doors at the south end of the building and one at the east dock.

2.7 Bridge Cranes

There are three bridge cranes in the building that service the high-bay area and the machine shop. The bridge crane in the machine shop is a ½-ton crane that travels the length of the shop. There are two bridge cranes that service the high-bay area. One is a 2-ton crane between column lines 1 and 2 that services the vacuum casting furnaces and the hydrospinning machine. The second bridge crane is a 10-ton crane between column lines 4 and 5 that services the extrusion press, heat treating furnaces, and the rolling mill.

In addition, there is a one ton jib crane located at the foot of the stairs going up to the casting furnace platform. In the beryllium electrorefining room is a ½ ton bridge crane.

3.0 UTILITIES

Argon

Argon is used in various heat-treating operations of the facility. Argon cylinders were stored in the northeast area of the high-bay (room 145) and attached to a manifold system. From the manifold the gases were distributed by a main line to the end-use operations.

Cooling Water Supply

Equipment needing to be cooled is cooled by a recirculating closed-loop, cooling system. Water circulates through the equipment by a pump and then back to the cooling tower located west of the building for heat extraction. The water in the cooling loop is a 40/60 mixture of water and ethylene glycol to prevent freezing of the system in winter. A more detailed description of the operation of the Building C865 Cooling Tower can be found in Section 10.0 "Building C865 Cooling Tower".

Compressed Air

Compressed air is supplied from one of two compressors, located in the mechanical room, in the southwest corner of the single-story portion of the building. The compressors run alternately with one on standby. The air is cooled, dried and stored in a receiver tank, and from there it goes into the distribution line to its end use.

Fire Suppression System

Sprinklers are installed throughout the Building 865 and the two exhaust plenums and are fed by the domestic cold water lines that enter the building through an 8-inch line on the east side of Building 864. The two exhaust plenums have overheat detectors that activate the deluge spray.

Helium

Helium cylinders were stored in the northeast area of the high-bay and attached to a manifold system for each gas. From the manifold the gases were distributed by a main line to their respective end-use points.

Nitrogen

Nitrogen was used in the beryllium electrorefining process. The gas cylinders were attached to a manifold and distribution header outside door 8 at the southwest corner of the building.

Oxygen and Propane

Oxygen cylinders, propane tanks and their respective manifolds were located outside on the west side of the building and piped to the hydrospinning operation where they were used. The cylinders were located approximately 50 feet to the west of the building.

Process Waste System

The liquid process waste system has drains throughout the building. The process wastes were originally designed to drain to two waste collection tanks located in a sump in Building 865. The waste left the building on the west side through a 3-inch stainless steel pipe to the site process waste system. Once the waste transfer building (Building 866) was constructed in 1972, Building 865 process waste was collected in Building 866 prior to discharge to the plant process waste system. See section 2.3 for additional information.

Sanitary Sewer

The sanitary sewer system services the Building 865 showers, washroom sinks, toilets, and janitor closets. Sanitary wastewater leaves the building through a 4-inch pipe on the east side of the building and is processed at the plant sewage treatment plant.

Steam System

Steam is supplied to the building from the steam plant, Building 443, and enters the building at 110 psi. It is used for heating the building, making hot water, and operating the steam hammer. The condensate is piped back to the Building 443 condensate receiver tank.

Storm Drains

Foundation drains were installed around the perimeter of the building, and a sump pump was installed at the lowest point of the northeast corner of the building. The discharge from the pump is led away from the building by a ditch into the existing plant surface water drainage system.

Water

Raw water is supplied to the building by the plant water system. Water is supplied through a 10-inch main that runs east along Central Avenue.

4.0 ELECTRICAL

Electric power is supplied to Building 865 from the plant 13.8 kV lines from Main plant substations 679 and 680. The 13.8 kV power supply is stepped down to 480 V at the

building's substations 865-1 and 865-2 for use by the Building 865 motor control center and emergency motor control center

The transformer and switchgear equipment in Building 863 supplied power to the extrusion press. This equipment is not longer active

5.0 HEATING, VENTILATION AND AIR CONDITIONING (HVAC)

The building has two supply and three exhaust systems that provide a single pass air system. The system is operated such that the high-bay is negative to the office area and the outside air.

The supply system plenums are located on the mezzanine in the high-bay. Air is drawn into the system through two roof inlet vents to each plenum. The air is heated in a preheat coil, filtered through a one stage bag filter, and washed in an air washer. Air is then distributed to the building by two supply fans, F-1 and F-2. Fan F-1 supplies the west half of the offices and the west half of the high-bay. F-2 supplies the east half of the offices and the east side of the high-bay.

Air from the offices is exhausted through an exhaust system located in the mechanical equipment room. The fan is suspended from the ceiling and exhausts through the roof.

Several of the metalworking and machining operations in the machine shop have exhaust hoods to contain the spread of contamination during operations. The exhaust from the machine shop hoods is pre-filtered before it enters the exhaust duct. The air is then exhausted from the building by an exhaust fan and HEPA filtration in Building 867 located at the southwest corner of the building. The remaining shop areas exhaust through the general shop exhaust system to the fan and HEPA filters in Building 868 located at the southeast corner of the building. There are two exhaust fans in Buildings 867 and 868, with one always in operation to provide room exhaust.

Hoods and operations that generated acid gases were exhausted through the caustic scrubber located on the mezzanine and then to the plenum in Building 867. The scrubber is not longer operational.

The general room air in the beryllium electrorefining room was maintained at a slight negative pressure to the high-bay room by controlling the inlet and exhaust flow with powered dampers. Air exhausted from the gloveboxes and the beryllium chloride preparation areas were exhausted to a caustic scrubber outside the building at the southwest corner. The air from this system was exhausted to the plenum in Building 867. Solution level and pH in the scrubber was maintained automatically with potassium hydroxide added by pump from the supply drum. The liquid level in the scrubber was increased by adding water or lowered by pumping the excess solution to the sump in room 151A. The sump in Room 151A is a closed system. The solution being referred to is the result of the Electrorefining (ER) Cell Stripout Process, located in Rooms 151 and 151A. This process was used for decontamination and decommissioning of the Beryllium Purification Process in Building 865. An electrolyte was prepared from salts consisting of

potassium chloride, lithium chloride, and beryllium chloride, which were mixed in a salt mix loading box and were collected in a low-level waste container, wash water was taken to Building 374 for treatment

6.0 BUILDING 865 OPERATIONAL HISTORY

6.1 Historical Processes

Building 865 was used for fabricating prototype hardware, and developing metal alloys and processes. Operations include metalworking, machining, and metallurgical laboratory operations.

The most common metals processed were depleted uranium, steel, and aluminum. Other metals worked in the building included copper, molybdenum, beryllium, titanium, silver, niobium, tantalum, gold, iridium, platinum, vanadium, tungsten, and alloys of these metals.

Metalworking

All metalworking operations were conducted in the high-bay area. Metalworking processes included arc and vacuum induction melting, hammer forging, press forming, hydrospinning, swaging, extruding, drawing, rolling, diffusion bonding, furnace heat treating, salt bath and glove box operations, and cutting and shearing.

Metals were melted using one of two methods: arc melting and vacuum furnace melting. In arc melting, the furnace is evacuated of air. With the power turned on, an arc is struck between the electrode and a starting block placed in the mold. Heat from the arc progressively melts the end of the electrode. The molten metal is transferred across the arc and deposited on top of an ingot situated in the mold. Materials melted with this process included stainless steel alloys, depleted uranium, depleted uranium alloys, and beryllium. In vacuum melting, an electrical current is induced into the metal by an induction coil connected to a power supply. The metal charge acts as a secondary circuit for the current. The melted metal (including beryllium, depleted uranium, copper, aluminum, lead, and steel) is then cast into molds.

There were several processes used to create forms or shapes for parts. Hammer forging, using a steam hammer, was used to force heated metal to conform to the shape of a metal die by hammer blows. The press-forming process pressed hot or cold beryllium, uranium, steel, and other ferrous and nonferrous metals into the desired shape. Hydrospinning formed hot or cold metals into desired shapes using rollers while the metal was rotated at a high speed. A torch, which burned a mixture of oxygen and propane, was used to keep the metal hot during hot metal hydrospinning. Swaging subjected stock (bar or tube) to a series of blows from two or four dies, which rotated around the stock so that the piece was hammered from all sides.

Other methods were used to produce specific types of shapes. Extrusion was used to produce cylindrical bars, hollow tubes, and shapes with irregular cross-sections by forcing preheated metal through a die orifice under high pressure. Drawing was used to change the cross-section of metal wire, rods or tubing by pulling the metal through a die. The rolling process, used to reduce cross-section, shaped metals by passing them between two rollers revolving at the same speed in opposite directions.

Metal parts were joined in a bonding process where thin layers of bonding material were plated on the surfaces of materials being joined. Pressure was applied to the joined surfaces (under an inert atmosphere or a vacuum) to create the bond.

Formed metal parts were furnace heat-treated in an argon or air atmosphere, or under a vacuum using electric resistance-type furnaces. Salt baths were used to heat metal pieces to a high temperature in preparation for forging, rolling, or some other type of working.

Operations involving beryllium powder were conducted inside of glove boxes. High-purity beryllium was produced and canned (sealed in a can) in glove boxes. Beryllium chips from lathe operations were processed in two types of mills (ball mill and a fluid energy mill) to form a powder. The powder was then sealed into stainless steel containers in preparation for further processing.

A large abrasive wheel was used to reduce large billets and bar stock to a useable size for further fabrication. Sheet metal was cut to the desired shape and size using a shear press.

Machining

Machining operations included milling, grinding, drilling and cutting operations. The machine shop was equipped with standard equipment, including surface grinders, drill presses, and saws. Other equipment in the machine shop was specialized, lathes and milling machines in the shop were equipped with tracers.

Metallurgy

A metallurgy laboratory, located in the northeastern corner of the building, conducted mechanical testing of metals and prepared metal samples for examination. Mechanical tests determined the tensile properties of the metals at room, elevated, and very low temperatures. Other tests measured hardness of the metals and alloys using various methods (Brinell, Rockwell, Knoop and Diamond Pyramid). These test methods used the depth of indentation of a steel ball, or a diamond pyramid under pressure, to measure hardness.

Samples were prepared for macroscopic and microscopic examination by sawing, cutting, mounting, grinding, polishing and etching operations. After preparation, the samples were visually examined at various magnifications and optical conditions to identify structural details, including the crystalline structure of alloys.

Miscellaneous Operations

A beryllium electrorefining cell, operated briefly in 1987, was designed as a one-half scale beryllium recovery experimental cell

The final use of the building was to conduct metallography laboratory work and decontamination activities for the product research and development group

6.2 Current Status

Currently the building is unoccupied. The cold area has had all of the office furniture and metallographic equipment removed from their rooms. The restrooms and locker rooms have had all the toilets, washbasins and lockers removed. No equipment has been removed from the mechanical room.

The hot side of the building has had hazard reduction operations performed in some areas. This consisted of the removal of the equipment in the machine and maintenance shops, the beryllium electrorefining gloveboxes and cell, the induction casting furnaces, and the arc melting furnace.

7.0 BUILDINGS 867 AND 868 EXHAUST PLENUMS

Buildings 867 and 868 are two exhaust plenums used to exhaust Building 865. Building 867 is located on the southwest corner of Building 865, and Building 868 is located on the southeast corner of Building 865. Building 867 is used to exhaust the air from the general work area of the Building 865 high-bay and laboratories. Building 868 is used to exhaust task specific air from hoods and machining equipment in Building 865. The original plenums were constructed in 1972 as part of the Building 865 original construction. The exhaust plenums were later upgraded in 1978.

The original exhaust plenums were a single stage filtration system with a single fan plenum. If power was lost to the fan, natural draft through the system's exhaust stack provided the exhaust for the building. When the Building 867 and Building 868 systems were upgraded, the size of the plenums were expanded to a two-stage filtration system. In addition, an additional fan was added.

The original plenum construction used square-metal-tube framing with sheet metal welded to the outside of the tube frame. The metal framing and the sheet metal walls were painted inside and out. The 1978 upgrades had similar construction as the original structures and used square-metal-tube frame. The only difference was that the sheet-steel walls were welded to the inside of the metal frame instead of the outside of the metal frame like the original section of the plenum.

The Building 867 and 868 plenums are a two-room structure consisting of a fan room, which houses the exhaust fans and the control boards. The fan rooms are posted as potentially containing asbestos. The second room is the filter plenums, which holds the

banks of HEPA filters. Since the plenums are posted as CAs, they were not entered for inspection.

The Building 867 filter plenum is currently and has been operational as the ventilation system for Building 865 since 1972. It was upgraded in 1978 to provide a second stage of filtration.

8.0 BUILDING 827 EMERGENCY GENERATOR

Building 827 is the Emergency Generator facility and is a 385 square foot structure built in 1972. Building 827 is a steel-frame building covered with steel, baked-on-enamel, panels. The building houses a diesel-driven generator that supplies emergency power to Buildings 883, 865 and 886. The building contains switchgear equipment to direct the emergency power and controls for starting the diesel engine.

Currently the building is operational and providing emergency power to all three buildings.

9.0 BUILDING C865 COOLING TOWER

Building C865 was constructed in approximately 1972 as part of the original construction of Building 865. Building C865 is an approximately 20-foot wide by 20-foot long by 10-foot high structure, which provides process cooling water to the machining equipment in Building 865. The cooling tower, located to the west of Building 865, is an open-loop, forced-draft tower in which cooled water is pumped to a heat exchanger in the mechanical room of Building 865. The water was treated to reduce sludge build-up and prevent the growth of algae. The tower is constructed of a metal frame with plastic distribution trays to disperse the cooling water. The ends of the tower and the side louvers may be constructed of asbestos board. The electric pump for circulating the tower water is located to the north side of the cooling tower.

The tower sits inside a concrete basin with 1-foot containment walls. The basin currently has standing water with algae growing in it. The integrity of the basin and the sump can not be determined. The basin was used to collect the cooling water and direct it to the sump on the north side of the tower. The circulating pump was used to redistribute the water through the process cooling system. Make-up water was supplied by the plant water system.

Some of the chemical which were used as algaecides and corrosive Inhibitors were

- 1) HTH (R) All Purpose Algaecide Ammonium, Alkyl (C12-C16) Dimethylbenzyl-, Chlorides
- 2) Nalco 2536 Corrosion Inhibitor Sodium Nitrite and Sodium Tetraborate (anhydrous)
- 3) HTH (R) "Mustard" Algaecide Alkyldimethyl Dichloro Benzyl Ammonium Chloride and Copper Triethanolamine Complex

In 1992 RFETS stopped the practice of adding chemicals to the cooling water. Building C865 is currently out of service.

10.0 BUILDING 866 WASTE TRANSFER STATION

Building 866 is known as the Waste Transfer Station and is an approximately 27-foot by 25-foot building constructed in 1972. Building 866 is a single-story, pre-engineered, metal-frame building on a concrete foundation and floor. The walls are constructed of enamel-covered steel panels with insulation sandwiched inside the panels. The floor has an approximately 3-foot by 3-foot sump in the northwest corner, which has been sealed due to cracks in the walls of the sump (see section on IHSSs, PACs and UBCs below for more information). The panels are painted white on the inside of the building and olive drab on the outside. The floor of the building is painted gray. The roof drains to a gutter and downspout on the west side of the roof, and the downspout discharges to a splash block on the ground. Water is then controlled by the site surface water drainage system.

Building 866 has a single entrance consisting of a double-hung metal door. Building 866 is connected to plant power for lighting and to operate the transfer pumps. The building is connected to plant steam for heat. Fire protection is provided by hand-held fire extinguishers. Originally liquid wastes in Building 865 drained to tanks located under the floor of Building 865. The Building 865 waste was then pumped under the floor of the building to the waste transfer system via Valve Vault 006.

Building 866 was built to house the waste holding tanks for Building 889 and Building 865. Building 866 originally had five waste tanks. Tanks T-4 and T-5 were each 400-gallon stainless-steel tanks and received waste from Building 889. Tanks T-4 and T-5 were closed and removed in 1998 in accordance with "Closure Plan, B883 A&B Series Waste Water Tank Systems". Tanks T-1, T-2 and T-3 are each 1200-gallon fiberglass tanks and received waste from Building 865. Tanks T-1, T-2 and T-3 are RCRA Stable in accordance with 99-DOE-03494. The tanks are equipped with a HEPA filter pressure-relief system that vents through the roof.

Waste from Building 889 was sent to the Building 866 by underground double-walled pipes. Waste from Building 895 was sent to Building 866 by double-walled overhead piping. Two pumps located inside Building 866 were used to pump the liquids between tanks and to Valve Vault 006 for transfer to the process waste distribution system. Currently the building is out of service. Signs posted on the doors leading into the building alert personnel of internal contamination in the tanks and contamination in the building due to spills.

The waste streams entering Building 866 from Building 865 contained solvents, metal fines, acids, bases, depleted uranium, and beryllium. Building 866 previously collected the aqueous waste stream from Building 889, which included detergents, oils, and possibly depleted uranium and beryllium. The Building 889 process waste system has been shut down, pumps have been locked out, and the transfer line has been blanked off. The Building 865 process waste system is currently out of service and has been placed in a RCRA STABLE condition.

11.0 EXTERIOR TANKS

The Building 865 Cluster has 5 exterior support tanks identified on the facility list. These tanks are:

- TK 25 - 1000-gallon aboveground diesel storage tank installed to replace UST-25 (aka tank 010) and is located south of Building 827. TK-25 is currently active.
- Tank 010 - 2000 gallon underground diesel storage tank and is located south of Building 827. This tank has been RCRA Closed and foamed in place.

12.0 POTENTIAL CONTAMINATION AND HAZARDS

Most of the process areas of Building 865 are contaminated with depleted uranium and other non-plutonium metals summarized in Section 10 above. In addition, beryllium was extensively worked and handled in the process and laboratory areas of Building 865. Many of these areas are posted as CAs. A current listing of CAs within Building 865 and its support facilities can be obtained from the building Radiological Control Manager. Building 865 is currently going through significant hazard reduction operations. Hazard and contamination levels may change with time.

The upgraded exhaust plenums, Building 867 and Building 868, are posted as CAs.

Building 866 is also posted as a CA. Waste tanks have internal contamination, and the floors of Building 866 are contaminated from past spills.

Building 827 has no radiological posting, but does have oil and diesel fuel stains on the floor.

Additional information on releases in and around Building 865 and the Building 865 support facilities are in Section 14, "Individual Hazardous Substance Sites (IHSSs), Potential Areas of Concern (PAC) and Under Building Contamination (UBC)"

12.1 Asbestos

All facilities in the Building 865 Cluster have asbestos postings. Building 865 is known to contain some asbestos containing material (ACM). A comprehensive asbestos building inspection has not been performed. Common ACM includes exterior siding, floor tiles, ceiling tiles and thermal insulation.

12.2 Beryllium

Building 865 has several rooms on the "Location of Known Beryllium Areas" list. These rooms are listed below. In addition, Building 867 and Building 868 are the plenum buildings for Building 865 and are also on the known beryllium location list. This list is not intended to be a comprehensive list of current Be contamination areas, but instead

intended to provide a indication of the extent of Be contamination in the Building 883 Cluster Be sampling will be performed, as needed, throughout the D&D process to determine the presence or absence of Be

BUILDING	ROOM	ACTIVITY
865	102	Metallurgical Laboratory
865	103	Metallurgical Laboratory
865	105	Unknown
865	106	Metallurgical Laboratory
865	107	Machining for Metallurgical Laboratory
865	108	Metallurgical Laboratory
865	135	Machining beryllium copper and maintenance shop
865	136	Machining Beryllium
865	138	Machine shop office for room 136
865	139	Unknown
865	144	Mold preparation for casting, and can preparation for HIP/CIP
865	145	Beryllium casting/powder metallurgy/forming/heat treating
865	145A	Control room for the extrusion press/beryllium control area
865	146	Step off pad
865	147	Size characterization of beryllium powder
865	148	Waste storage/beryllium control area
865	149	Collection of beryllium fines (house vacuum system)
865	151	Beryllium electrorefining cell
865	151A	Beryllium electrorefining cell
865	152	Beryllium electrorefining cell control room
865	153	Hot isostatic press (HIP) (beryllium forming)
865	171	Shipping and receiving
865	172	Permacon used to repackage beryllium material
867	N/A	Plenum for Building 865, local exhaust system
868	N/A	Plenum for Building 865, general room ventilation

12.3 RCRA Regulated Units.

The Building 865 cluster has several areas on the "Master List of RCRA Units" These areas are listed below Building 865 and Building 866 are the only buildings in the Building 865 Cluster with location identified on the Master List of RCRA Units

Unit #	Building	Unit Description	Regulatory Status	Closure Status
40 46	865	Sump Tank P- 9 (Sump 145A), Rm 145	No longer subject to RCRA regulation	CLOSED in accordance with revision to "Certification of RCRA Closures for Buildings 865, 883, and 889 (866)", original Closure Certification dated 4/30/98 (ref 98-DOE-03363, 6/10/98),

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				revision dated 4/27/99 (ref memo from D Pontus, P E , to T Hopkins, RMRS Env Mgr , 4/27/99)
40 47	865	Sump Tank ST-151	Existed, but never used, not subject to RCRA regulation	WITHDRAWN 4/12/95 (ref 95-DOE-09335)
865 3	865	Polymer Macroencapsulation	No longer subject to RCRA regulation	ADMINISTRATIVELY CLOSED per 00-RF-01226 (04/12/00, transmitted to CDPHE 04/28/00) This unit was never placed into service, never used to treat hazardous waste, and has no intended use elsewhere on Site
40 17	866	Process Waste Tank T-1	INTERIM STATUS	RCRA STABLE per 99-DOE-03494 (1/28/99), approved by CDPHE 8/23/99, currently subject to quarterly inspections, to be closed in accordance with "Closure Plan for Interim Status Units at RFETS "
40 18	866	Process Waste Tank T-2	INTERIM STATUS	RCRA STABLE per 99-DOE-03494 (1/28/99), approved by CDPHE 8/23/99, currently subject to quarterly inspections, to be closed in accordance with "Closure Plan for Interim Status Units at RFETS "
40 19	866	Process Waste Tank T-3	INTERIM STATUS	RCRA STABLE per 99-DOE-03494 (1/28/99), approved by CDPHE 8/23/99, currently subject to quarterly inspections, to be closed in accordance with "Closure Plan for Interim Status Units at RFETS "
40 32	866	Waste Tank T-4 (B889 waste)	No longer subject to RCRA regulation	CLOSED in accordance with "Closure Plan, B883 A&B Series Waste Water Tank Systems" (dated 6/23/97, approved by CDPHE 10/16/97), Closure Certification signed 4/30/98 (ref 98-DOE-03363, 6/10/98) (Note The secondary containment for this unit is in a RCRA Stable configuration)
40 33	866	Waste Tank T-5 (B889 waste)	No longer subject to RCRA regulation	CLOSED in accordance with "Closure Plan, B883 A&B Series Waste Water Tank Systems" (dated 6/23/97, approved by CDPHE 10/16/97), Closure Certification signed 4/30/98 (ref 98-DOE-03363, 6/10/98) (Note The secondary containment for this unit is in a RCRA Stable configuration)

12.4 Idle Equipment

None of the facilities in the 865 Cluster have equipment on the Idle Equipment Management Plan's list of RCRA Hazardous Equipment The site-wide Idle Equipment Management Plan no longer tracks RCRA non-hazardous equipment An outdated list of

RCRA non -hazardous equipment can be obtained from the RFETS Environmental Systems and Stewardship Group

13.0 INDUSTRIAL HAZARDOUS SUBSTANCE SITES (IHSS), POTENTIAL AREAS OF CONTAMINATION (PACS) AND UNDER BUILDING CONTAMINATION (UBC)

The Building 865 Cluster has several IHSSs, PACs, and UBCs that are either in the buildings, under the buildings, or close enough to the buildings to warrant mention in this report. Most of these IHSS, PACs, and UBCs are not within the scope of this project. They have been identified to provide general information about events which have occurred in the vicinity of the 865 Cluster facilities.

UBC

Building 886 is on the UBC list as UBC-865. The UBC list is not intended to be a complete list of buildings with UBC, but rather a list of buildings whose operating history or historical event show that UBC may likely exist. Additional information can be found in the individual IHSS/PAC reports.

- UBC 865 Building 865 Material and Process Development Lab. This UBC is active but out of the scope of this project.

Building 865 is identified, as an UBC because of the documented and undocumented releases believed to have occurred from the waste process lines and the original waste process tank located in the Building 865 floor slab. See Section 2.3 and Section 3.0 for additional information.

IHSS/PAC

- IHSS/PAC 800-179 – “Building 865 Drum Storage Area” The NFA for this IHSS will be submitted for approval in the 2001 HRR annual update.

Building 865 had a drum storage area in room 145. The area later became a RCRA 90-day pad. This storage location held a maximum of 10 55-gallon drums. Drums stored there contained VOC compounds, beryllium, chlorinated solvents, and radioactive wastes. This IHSS was being studied as part of OU15. A visual inspection in November of 1986 showed no evidence of any spills or releases.

- IHSS/PAC 800-1203 – “Sanitary Sewer Line Break Between Buildings 865 And 886” This IHSS was approved as NFA in 1992.

In June of 1982 construction crews broke the sanitary sewer line between Building 865 and B886. The sewage did not reach the Central Avenue ditch, therefore, it was considered to have no impact on the down stream ponds.

- IHSS/PAC 800-1204 – “Building 886 Spills” This IHSS is Active Building held 5 waste process tanks that were used by Building 865 and B899 Two documented contamination releases from these tanks were documented

1986-Tank Overflow - Decontamination water from a sump in B889 waste pumped to the waste process tanks in building 866 These tanks overfilled and water passed through the vent on the roof where it drained to the ground through the downspouts A similar incident occurred in 1983, but apparently the water ran into building 866 instead of outside

1986 – Tank Overflow – The filling of process waste tanks in building 866 resulted in an overflow of process waste through the roof vent and out the downspout releasing approximately 20 gallons to the ground No contamination was found on the ground or in the building

- IHSS/PAC 800-1210 – “Transformer 865-1 and 865-2” This IHSS was proposed NFA in the 1996 HRR annual up-date and is awaiting approval

Transformer 865-1 and 865-2 located west of Building 865 had leaked in the past These transformers were retro-filled and placed on a new bermed pad just north of the old pad The old pad was partially removed when installing the new pad

- IHSS/PAC 800-1212 – “Building 866 Sump” This IHSS is active

During a walkdown, in April of 1992, a plant engineer noticed that the concrete sump inside the secondary containment system for the collection waste did not contain an epoxy coating In addition there was approximately six inched of liquid/sludge in the sump The liquid and sludge was sampled and found to contain elevated gross alpha and beryllium The liquid in the sump was concluded to be from two sources 1) residual waste from the spills documented in PAC 800-1204 and 2) groundwater seepage into the sump and a potential pathway for contamination to the environment The sump has since been sealed off with a steel plate with a glass window to monitor water levels in the sump

14.0 865 Cluster Preliminary List of Potencial COCs

	Building 827	Building 865	Building C865	Building 866	Building 867	Building 868	TK 25	Tank 010
Asbestos	X	X	X	X	X	X		
Beryllium		X		X	X	X		
Lead								
Lead - paint	X	X		X	X	X	X	X
Lead - electrical equipment	X	X	X	X	X	X		
Lead-processes (storage, operations, wastes)								
Lead - shielding								
PCBs								
PCBs - paint	X	X		X	X	X	X	X
PCBs - equipment		X						
PCBs - ballasts	X	X		X	X	X		
VOAs		X		X				
Semi-VOAs	X	X		X				
Metals	X	X	X	X	X	X		
Radiological								
Pu								
U - 235				X				
U - 238		X		X	X	X		
U - 233								
Thorium								
Cobalt 60	X							

Note This is a preliminary list of potential COCs based on a review of the historical processes, the HRR, the facility WSRIC and the interviews. The characterization SMEs should evaluate/verify this information and modify this list during building walkdowns and characterization package development.

Note See facility WSRIC for additional information.

Note Lead in Paint will be managed in accordance with the RFETS Guidance Document 27 "Lead Based Paint (LBP) and LBP disposal".

15.0 Waste Volumes for the 865 Cluster Buildings and Tanks

Waste Volume Estimates and Material Types							
Facility	Concrete (cu ft)	Wood (cu ft)	Metal (cu ft)	Corrugated Sheet Metal (cu ft)	Wall Board (cu ft)	ACM	Other Waste
865	77,700	0	1000	0	3600	200 ¹	Urethane 20,000 cu ft
827	300	0	200	0	0	10 ¹	0
Building C865	410	0	100	0	0	40 ¹	Plastic 760 cu ft
866	525	0	200	0	0	TBD	Insulation 230 cu ft
867	1970	0	500	320	0	TBD	0
868	1970	0	500	230	0	TBD	0
TK 25	100	0	0	0	0	0	0
Tank 010	27	0	0	0	0	0	Aluminum 3 cu ft

1 Volumes are estimates

Prepared By: Doug Bryant

Name

Doug Bryant

Signature

July 2001

Date

**D&D RISS Facility Characterization
Historical Site Assessment - Interview Checklist**

Facility ID- Building 827 Emergency Generator Building
Anticipated Facility Type (1, 2, or 3) 1

This facility specific Historical Site Assessment (HSA) - Interview Checklist has been conducted in accordance with
D&D Characterization Protocol, RFETS MAN-077-DDCP, latest version, and
Facility Disposition Program Manual, RFETS MAN-076-FDPM, latest version

Personnel Interviewed (Name, Title, and Function)

Richard Link, Radiological Engineer, Building Closure Support, RISS Closure Support, PU&D Radiological Support

What time frame did the interviewee work in the facility? What was his/her function(s)?

Richard periodically worked in the Building 865 Cluster from 1966 until 1985 as an RCT, Industrial Hygiene Technician and Health Physicist

Has the building configuration changed since you worked in the building (e g , rooms & equipment)? Have there been any building renovations? If so, in what way?

Richard Link has no comments or concerns

What operations/processes were conducted in the building during the interviewee's time in the facility?

Richard Link has no comments or concerns

What types of equipment were used, and where was the equipment located? (specific rooms/areas)

Richard Link has no comments or concerns

Were any radioactive materials or equipment handled in the building (e g , wastes, residues, product, feed material, sealed radioactive sources)? If so, what types and where?

Richard Link has no comments or concerns

Were there any Research & Development area (past or present) located in the facility or area? If so, where?

Richard Link has no comments or concerns

**D&D RISS Facility Characterization
Historical Site Assessment - Interview Checklist**

Were there any Asbestos Containing Materials (e g , transite wall board, ceiling tiles, floor tile), lead shielding, equipment utilizing PCB oils (e g , process equipment, lifts, hydraulic systems, etc), or any other chemical hazards (past or present)?

Richard Link has no comments or concerns

Did any spills or uncontrolled release of radioactive materials or chemicals occur while you worked in the building? If so, what types, quantities, and where?

Spills or uncontrolled releases of depleted uranium and beryllium could have been released in the airlock during filter changes

Were these spills/releases cleaned up or mitigated? If so, how, and to what extent?

The spills were cleaned up to the standards of the day

Do you know of any additional issues, concerns, or process knowledge that could affect facility characterization?

Yes As the building is the ventilation exhaust for the high bay and its equipment it is contaminated with depleted uranium and beryllium

Prepared By

Dean Burton

Print Name

Dean Burton

Signature

10/24/01

Date

**D&D RISS Facility Characterization
Historical Site Assessment - Interview Checklist**

Facility ID- Building 863 Transformer and Switchgear
Anticipated Facility Type (1, 2, or 3) 1

This facility specific Historical Site Assessment (HSA) - Interview Checklist has been conducted in accordance with
D&D Characterization Protocol, RFETS MAN-077-DDCP, latest version, and
Facility Disposition Program Manual, RFETS MAN-076-FDPM, latest version

Personnel Interviewed (Name, Title, and Function)

Richard Link, Radiological Engineer, Building Closure Support, RISS Closure Support, PU&D Radiological Support

What time frame did the interviewee work in the facility? What was his/her function

Richard periodically worked in the Building 865 Cluster from 1966 until 1985 as an RCT, Industrial Hygiene Technician and Health Physicist

Has the building configuration changed since you worked in the building (e g , rooms & equipment)? Have there been any building renovations? If so, in what way?

Richard Link has no comments or concerns

What operations/processes were conducted in the building during the interviewee's time in the facility?

Richard Link has no comments or concerns

What types of equipment were used, and where was the equipment located? (specific rooms/areas)

Richard Link has no comments or concerns

Were any radioactive materials or equipment handled in the building (e g , wastes, residues, product, feed material, sealed radioactive sources)? If so, what types and where?

Richard Link has no comments or concerns

Were there any Research & Development area (past or present) located in the facility or area? If so, where?

Richard Link has no comments or concerns

**D&D RISS Facility Characterization
Historical Site Assessment - Interview Checklist**

Were any chemicals (e g , Beryllium, RCRA/CERCLA Constituents, PCBs, etc) handled in the building? If so, what types and where?

Richard Link has no comments or concerns

Were there any Asbestos Containing Materials (e g , transite wall board, ceiling tiles, floor tile), lead shielding, equipment utilizing PCB oils (e g , process equipment, lifts, hydraulic systems, etc), or any other chemical hazards (past or present)?

Richard Link has no comments or concerns

Did any spills or uncontrolled release of radioactive materials or chemicals occur while you worked in the building? If so, what types, quantities, and where?

Richard Link has no comments or concerns

Were these spills/releases cleaned up or mitigated? If so, how, and to what extent?

Richard Link has no comments or concerns

Do you know of any additional issues, concerns, or process knowledge that could affect facility characterization?

Yes As the equipment in the building was maintained by Building 865 maintenance personnel, they could have inadvertently carried low levels of contamination into the building Also due to its proximity to two buildings, Buildings 883 and 865, that handled beryllium and uranium, it will have to be sampled for Be and U

Prepared By

Dean Burton

Print Name

Signature

Date

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**D&D RISS Facility Characterization
Historical Site Assessment - Interview Checklist**

Facility ID Building C865 Cooling Tower

Anticipated Facility Type (1, 2, or 3) 1

This facility specific Historical Site Assessment (HSA) - Interview Checklist has been conducted in accordance with
D&D Characterization Protocol, RFETS MAN-077-DDCP, latest version, and
Facility Disposition Program Manual, RFETS MAN-076-FDPM, latest version

Personnel Interviewed (Name, Title, and Function)

Richard Link, Radiological Engineer, Building Closure Support, RISS Closure Support, PU&D Radiological Support

What time frame did the interviewee work in the facility? What was his/her function(s)?

Richard periodically worked in the Building 865 Cluster from 1966 until 1985 as an RCT, Industrial Hygiene Technician and Health Physicist

Has the building configuration changed since you worked in the building (e g , rooms & equipment)? Have there been any building renovations? If so, in what way?

Richard Link has no comments or concerns

What operations/processes were conducted in the building during the interviewee's time in the facility?

Richard Link has no comments or concerns

What types of equipment were used, and where was the equipment located? (specific rooms/areas)

Richard Link has no comments or concerns

Were any radioactive materials or equipment handled in the building (e g , wastes, residues, product, feed material, sealed radioactive sources)? If so, what types and where?

Richard Link has no comments or concerns

Were there any Research & Development area (past or present) located in the facility or area? If so, where?

Richard Link has no comments or concerns

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**D&D RISS Facility Characterization
Historical Site Assessment - Interview Checklist**

Were any chemicals (e g , Beryllium, RCRA/CERCLA Constituents, PCBs, etc) handled in the building? If so, what types and where?

Richard Link has no comments or concerns

Were there any Asbestos Containing Materials (e g , transite wall board, ceiling tiles, floor tile), lead shielding, equipment utilizing PCB oils (e g , process equipment, lifts, hydraulic systems, etc), or any other chemical hazards (past or present)

Richard Link has no comments or concerns

Did any spills or uncontrolled release of radioactive materials or chemicals occur while you worked in the building? If so, what types, quantities, and where?

Richard Link has no comments or concerns

Were these spills/releases cleaned up or mitigated? If so, how, and to what extent?

Richard Link has no comments or concerns

Do you know of any additional issues, concerns, or process knowledge that could affect facility characterization?

Yes As the equipment in the building was maintained by Building 865 maintenance personnel they could have inadvertently carried low levels of contamination into the building Also due to its proximity to two buildings, Buildings 883 and 865, that handled beryllium and uranium it will have to be sampled for Be and U

Prepared By

Dean Burton

Print Name

Signature

Date

**D&D RISS Facility Characterization
Historical Site Assessment - Interview Checklist**

Facility ID Tank 026 CO₂ Deluge Tank
Anticipated Facility Type (1, 2, or 3) 1

This facility specific Historical Site Assessment (HSA) - Interview Checklist has been conducted in accordance with
D&D Characterization Protocol, RFETS MAN-077-DDCP, latest version, and
Facility Disposition Program Manual, RFETS MAN-076-FDPM, latest version

Personnel Interviewed (Name, Title, and Function)

Richard Link, Radiological Engineer, Building Closure Support, RISS Closure Support, PU&D Radiological Support

What time frame did the interviewee work in the facility? What was his/her function(s)?

Richard periodically worked in the Building 865 Cluster from 1966 until 1985 as an RCT, Industrial Hygiene Technician and Health Physicist

Has the building configuration changed since you worked in the building (e g , rooms & equipment)? Have there been any building renovations? If so, in what way?

Richard Link has no comments or concerns

What operations/processes were conducted in the building during the interviewee's time in the facility?

Richard Link has no comments or concerns

What types of equipment were used, and where was the equipment located? (specific rooms/areas)

Richard Link has no comments or concerns

Were any radioactive materials or equipment handled in the building (e g , wastes, residues, product, feed material, sealed radioactive sources)? If so, what types and where?

Richard Link has no comments or concerns

Were there any Research & Development area (past or present) located in the facility or area? If so, where?

Richard Link has no comments or concerns

**D&D RISS Facility Characterization
Historical Site Assessment - Interview Checklist**

Were any chemicals (e g , Beryllium, RCRA/CERCLA Constituents, PCBs, etc) handled in the building? If so, what types and where?

Richard Link has no comments or concerns

Were there any Asbestos Containing Materials (e g , transite wall board, ceiling tiles, floor tile), lead shielding, equipment utilizing PCB oils (e g , process equipment, lifts, hydraulic systems, etc), or any other chemical hazards (past or present)?

Richard Link has no comments or concerns

Did any spills or uncontrolled release of radioactive materials or chemicals occur while you worked in the building? If so, what types, quantities, and where?

Richard Link has no comments or concerns

Were these spills/releases cleaned up or mitigated? If so, how, and to what extent

Richard Link has no comments or concerns

Do you know of any additional issues, concerns, or process knowledge that could affect facility characterization?

Yes As the equipment in and on the cooling tower was maintained by Building 865 maintenance personnel they could have inadvertently carried low levels of contamination into the building Also due to its proximity to two buildings, Buildings 883 and 865, that handled beryllium and uranium it will have to be sampled for Be and U

Prepared By

Dean Burton

Print Name

Signature

Date

**D&D RISS Facility Characterization
Historical Site Assessment - Interview Checklist**

Facility ID Tank TK25 Diesel Fuel Storage Tank

Anticipated Facility Type (1, 2, or 3) 1

This facility specific Historical Site Assessment (HSA) - Interview Checklist has been conducted in accordance with
D&D Characterization Protocol, RFETS MAN-077-DDCP, latest version, and
Facility Disposition Program Manual, RFETS MAN-076-FDPM, latest version

Personnel Interviewed (Name, Title, and Function)

Richard Link, Radiological Engineer, Building Closure Support, RISS Closure Support, PU&D Radiological Support

What time frame did the interviewee work in the facility? What was his/her function(s)?

Richard periodically worked in the Building 865 Cluster from 1966 until 1985 as an RCT, Industrial Hygiene Technician and Health Physicist

Has the building configuration changed since you worked in the building (e g , rooms & equipment)? Have there been any building renovations? If so, in what way?

Richard Link has no comments or concerns

What operations/processes were conducted in the building during the interviewee's time in the facility?

Richard Link has no comments or concerns

What types of equipment were used, and where was the equipment located? (specific rooms/areas)

Richard Link has no comments or concerns

Were any radioactive materials or equipment handled in the building (e g , wastes, residues, product, feed material, sealed radioactive sources)? If so, what types and where?

Richard Link has no comments or concerns

Were there any Research & Development area (past or present) located in the facility or area? If so, where?

Richard Link has no comments or concerns

Were any chemicals (e g , Beryllium, RCRA/CERCLA Constituents, PCBs, etc) handled in the building? If so, what types and where?

Richard Link has no comments or concerns

**D&D RISS Facility Characterization
Historical Site Assessment - Interview Checklist**

Were any chemicals (e g , Beryllium, RCRA/CERCLA Constituents, PCBs, etc) handled in the building? If so, what types and where?

Richard Link has no comments or concerns

Were there any Asbestos Containing Materials (e g , transite wall board, ceiling tiles, floor tile), lead shielding, equipment utilizing PCB oils (e g , process equipment, lifts, hydraulic systems, etc), or any other chemical hazards (past or present)?

Richard Link has no comments or concerns

Did any spills or uncontrolled release of radioactive materials or chemicals occur while you worked in the building? If so, what types, quantities, and where?

Richard Link has no comments or concerns

Were these spills/releases cleaned up or mitigated? If so, how, and to what extent?

Richard Link has no comments or concerns

Do you know of any additional issues, concerns, or process knowledge that could affect facility characterization?

Yes As the tank was maintained by Building 865 maintenance personnel they could have inadvertently carried low levels of contamination to the tank Also due to its proximity to two buildings, Buildings 883 and 865, that handled beryllium and uranium it will have to be sampled for Be and U

Prepared By

Dean Burton

Print Name

Signature

Date

**D&D RISS Facility Characterization
Historical Site Assessment - Interview Checklist**

Facility ID Tank 024 Propane Tank (removed)

Anticipated Facility Type (1, 2, or 3) 1

This facility specific Historical Site Assessment (HSA) - Interview Checklist has been conducted in accordance with
D&D Characterization Protocol, RFETS MAN-077-DDCP, latest version, and
Facility Disposition Program Manual, RFETS MAN-076-FDPM, latest version

Personnel Interviewed (Name, Title, and Function)

Richard Link, Radiological Engineer, Building Closure Support, RISS Closure Support, PU&D Radiological Support

What time frame did the interviewee work in the facility? What was his/her function(s)?

Richard periodically worked in the Building 865 Cluster from 1966 until 1985 as an RCT, Industrial Hygiene Technician and Health Physicist

Has the building configuration changed since you worked in the building (e g , rooms & equipment)? Have there been any building renovations? If so, in what way?

Richard Link has no comments or concerns

What operations/processes were conducted in the building during the interviewee's time in the facility?

Richard Link has no comments or concerns

What types of equipment were used, and where was the equipment located? (specific rooms/areas)

Richard Link has no comments or concerns

Were any radioactive materials or equipment handled in the building (e g , wastes, residues, product, feed material, sealed radioactive sources)? If so, what types and where?

Richard Link has no comments or concerns

Were there any Research & Development area (past or present) located in the facility or area? If so, where?

Richard Link has no comments or concerns

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**D&D RISS Facility Characterization
Historical Site Assessment - Interview Checklist**

Were there any Asbestos Containing Materials (e g , transite wall board, ceiling tiles, floor tile), lead shielding, equipment utilizing PCB oils (e g , process equipment, lifts, hydraulic systems, etc), or any other chemical hazards (past or present)?

Richard Link has no comments or concerns

Did any spills or uncontrolled release of radioactive materials or chemicals occur while you worked in the building? If so, what types, quantities, and where?

Richard Link has no comments or concerns

Were these spills/releases cleaned up or mitigated? If so, how, and to what extent?

Richard Link has no comments or concerns

Do you know of any additional issues, concerns, or process knowledge that could affect facility characterization?

Yes Due to its proximity to two buildings, Buildings 883 and 865, that handled beryllium and depleted uranium it will have to be sampled for Be and U

Prepared By

Dean Burton
Print Name

Dean Burton
Signature

10/12/14
Date

**D&D RISS Facility Characterization
Historical Site Assessment - Interview Checklist**

Facility ID Tank 010 Diesel Fuel Storage (closed)
Anticipated Facility Type (1, 2, or 3) 1

This facility specific Historical Site Assessment (HSA) - Interview Checklist has been conducted in accordance with
D&D Characterization Protocol, RFETS MAN-077-DDCP, latest version, and
Facility Disposition Program Manual, RFETS MAN-076-FDPM, latest version

Personnel Interviewed (Name, Title, and Function)

Richard Link, Radiological Engineer, Building Closure Support, RISS Closure Support, PU&D Radiological Support

What time frame did the interviewee work in the facility? What was his/her function(s)?

Richard periodically worked in the Building 865 Cluster from 1966 until 1985 as an RCT, Industrial Hygiene Technician and Health Physicist

Has the building configuration changed since you worked in the building (e g , rooms & equipment)? Have there been any building renovations? If so, in what way?

Richard Link has no comments or concerns

What operations/processes were conducted in the building during the interviewee's time in the facility?

Richard Link has no comments or concerns

What types of equipment were used, and where was the equipment located? (specific rooms/areas)

Richard Link has no comments or concerns

Were any radioactive materials or equipment handled in the building (e g , wastes, residues, product, feed material, sealed radioactive sources)? If so, what types and where?

Richard Link has no comments or concerns

Were there any Research & Development area (past or present) located in the facility or area? If so, where?

Richard Link has no comments or concerns

Were any chemicals (e g , Beryllium, RCRA/CERCLA Constituents, PCBs, etc) handled in the building? If so, what types and where?

Richard Link has no comments or concerns

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**D&D RISS Facility Characterization
Historical Site Assessment - Interview Checklist**

Were any chemicals (e g , Beryllium, RCRA/CERCLA Constituents, PCBs, etc) handled in the building? If so, what types and where?

Richard Link has no concerns in this area

Were there any Asbestos Containing Materials (e g , transite wall board, ceiling tiles, floor tile), lead shielding, equipment utilizing PCB oils (e g , process equipment, lifts, hydraulic systems, etc), or any other chemical hazards (past or present)?

Richard Link has no comments or concerns

Did any spills or uncontrolled release of radioactive materials or chemicals occur while you worked in the building? If so, what types, quantities, and where?

Richard Link has no comments or concerns

Were these spills/releases cleaned up or mitigated? If so, how, and to what extent?

Richard Link has no comments or concerns

Do you know of any additional issues, concerns, or process knowledge that could affect facility characterization?

None Tank has been released under a PRE form

Prepared By

Dean Burton
Print Name

Dean Burton
Signature

10/24/01
Date

**D&D RISS Facility Characterization
Historical Site Assessment - Interview Checklist**

Facility ID Tank 252 Argon Tank (removed)

Anticipated Facility Type (1, 2, or 3). 1

This facility specific Historical Site Assessment (HSA) - Interview Checklist has been conducted in accordance with
D&D Characterization Protocol, RFETS MAN-077-DDCP, latest version, and
Facility Disposition Program Manual, RFETS MAN-076-FDPM, latest version

Personnel Interviewed (Name, Title, and Function)

Richard Link, Radiological Engineer, Building Closure Support, RISS Closure Support, PU&D Radiological Support

What time frame did the interviewee work in the facility? What was his/her function(s)?

Richard periodically worked in the Building 865 Cluster from 1966 until 1985 as an RCT, Industrial Hygiene Technician and Health Physicist

Has the building configuration changed since you worked in the building (e g , rooms & equipment)? Have there been any building renovations? If so, in what way?

Richard Link has no comments or concerns

What operations/processes were conducted in the building during the interviewee's time in the facility?

Richard Link has no comments or concerns

What types of equipment were used, and where was the equipment located? (specific rooms/areas)

Richard Link has no comments or concerns

Were any radioactive materials or equipment handled in the building (e g , wastes, residues, product, feed material, sealed radioactive sources)? If so, what types and where?

Richard Link has no comments or concerns

Were there any Research & Development area (past or present) located in the facility or area? If so, where?

Richard Link has no comments or concerns

Were any chemicals (e g , Beryllium, RCRA/CERCLA Constituents, PCBs, etc) handled in the building? If so, what types and where?

Richard Link has no comments or concerns

**D&D RISS Facility Characterization
Historical Site Assessment - Interview Checklist**

Were there any Asbestos Containing Materials (e g , transite wall board, ceiling tiles, floor tile), lead shielding, equipment utilizing PCB oils (e g , process equipment, lifts, hydraulic systems, etc), or any other chemical hazards (past or present)?

Richard Link has no comments or concerns

Did any spills or uncontrolled release of radioactive materials or chemicals occur while you worked in the building? If so, what types, quantities, and where?

Richard Link has no comments or concerns

Were these spills/releases cleaned up or mitigated? If so, how, and to what extent?

Richard Link has no comments or concerns

Do you know of any additional issues, concerns, or process knowledge that could affect facility characterization?

None as the tank is RCRA closed

Prepared By

Dean Burton

Print Name

Signature

Date

D&D RISS Facility Characterization Historical Site Assessment - Interview Checklist

Facility ID 865 Cluster

Anticipated Facility Type (1, 2, or 3) 2

This facility specific Historical Site Assessment (HSA) - Interview Checklist has been conducted in accordance with
D&D Characterization Protocol, RFETS MAN-077-DDCP, latest version, and
Facility Disposition Program Manual, RFETS MAN-076-FDPM, latest version

Personnel Interviewed (Name, Title, and Function)

Gary Konwinski, Facility Manager – Responsible for all building activities

What time frame did the interviewee work in the facility? What was his/her function(s)?

1998 to 2001

Has the building configuration changed since you worked in the building (e g , rooms & equipment)? Have there been any building renovations? If so, in what way?

No, I was responsible for removing all residents from the buildings

What operations/processes were conducted in the building during the interviewee's time in the facility?

Property and equipment removal (approximately 14,000 items) Waste packing of about 800,000 pounds, oil draining of all equipment (7,000 gallons) Electrical disconnects of all non-essential equipment (about 100 items) Removal of 100 legacy waste containers

What types of equipment were used, and where was the equipment located? (specific rooms/areas)

N/A

Were any radioactive materials or equipment handled in the building (e g , wastes, residues, product, feed material, sealed radioactive sources)? If so, what types and where?

Yes, depleted uranium was the isotope I did a study in 1998? That verified the only isotope in the building was depleted uranium There is a characterization letter to this affect in the building file

Were there any Research & Development area (past or present) located in the facility or area? If so, where?

Yes, B865 was an R&D shop, both CA and non-CA areas

Were any chemicals (e g , Beryllium, RCRA/CERCLA Constituents, PCBs, etc) handled in the building? If so, what types and where?

Yes, beryllium was located throughout the entire building and its use is well documented All elemental beryllium has been removed with the exception of residual "dust" Several RCRA waste streams were managed in the building, all of which have been removed To my knowledge there is no residual remaining

**D&D RISS Facility Characterization
Historical Site Assessment - Interview Checklist**

<p>Were there any Asbestos Containing Materials (e g , transite wall board, ceiling tiles, floor tile), lead shielding, equipment utilizing PCB oils (e g , process equipment, lifts, hydraulic systems, etc), or any other chemical hazards (past or present)?</p> <p>Richard Link has no comments or concerns</p>
<p>Did any spills or uncontrolled release of radioactive materials or chemicals occur while you worked in the building? If so, what types, quantities, and where?</p> <p>Richard Link has no comments or concerns</p>
<p>Were these spills/releases cleaned up or mitigated? If so, how, and to what extent?</p> <p>Richard Link has no comments or concerns</p>
<p>Do you know of any additional issues, concerns, or process knowledge that could affect facility characterization?</p> <p>None as the tank has been removed before the building D&D had started</p>

Prepared By

Dean Burton
Print Name

Signature

Date

**D&D RISS Facility Characterization
Historical Site Assessment - Interview Checklist**

Facility ID 863 Transformer and Switchgear

Anticipated Facility Type (1, 2, or 3) 1

This facility specific Historical Site Assessment (HSA) - Interview Checklist has been conducted in accordance with
D&D Characterization Protocol, RFETS MAN-077-DDCP, latest version, and
Facility Disposition Program Manual, RFETS MAN-076-FDPM, latest version

Personnel Interviewed (Name, Title, and Function)

Jerry Anderson, Project Manager , D&D of Buildings 865, 883, 886 clusters

What time frame did the interviewee work in the facility? What was his/her function(s)?

Jerry worked here from 2000 to 2001 as Project Manager for D&D of Buildings 865, 883, and 886 clusters

Has the building configuration changed since you worked in the building (e g , rooms & equipment)? Have there been any building renovations? If so, in what way?

No The building configuration has not changed

What operations/processes were conducted in the building during the interviewee's time in the facility?

No operations as the building operations are closed and the power is shut off

What types of equipment were used, and where was the equipment located? (specific rooms/areas)

There is a 13 8 kV transformer on a pad to the south of the building and a bus bar running into the building The building contains electric switchgear for the extrusion press in Building 865

Were any radioactive materials or equipment handled in the building (e g , wastes, residues, product, feed material, sealed radioactive sources)? If so, what types and where?

None No radioactive materials were handled in the building

Were there any Research & Development area (past or present) located in the facility or area? If so, where?

Yes Building 865 was a R&D building

Were any chemicals (e g , Beryllium, RCRA/CERCLA Constituents, PCBs, etc) handled in the building? If so, what types and where?

None The transformer is a non PCB oil transformer

D&D RISS Facility Characterization Historical Site Assessment - Interview Checklist

Were there any Asbestos Containing Materials (e g , transite wall board, ceiling tiles, floor tile), lead shielding, equipment utilizing PCB oils (e g , process equipment, lifts, hydraulic systems, etc), or any other chemical hazards (past or present)?

Yes, floor tiles and pipe insulation Ceiling tiles were sampled and found to be non-ACM They were and waste packed accordingly No lead shielding, but lead used for press ballast This lead was waste packed and removed from the building One transformer was known to contain PCBs It was removed from the building and recycled Approximately 7,000 gallons of oil were drained from the presses, and forming machines in the building None was found to contain PCBs

Did any spills or uncontrolled release of radioactive materials or chemicals occur while you worked in the building? If so, what types, quantities, and where?

There was a "flow" of the sprinkler system on September 13, 1999 This event released about 3,000 gallons of water into the CA Clean-up efforts took place that day, through the night, and into the next day Water was containerized and allowed to evaporate Waste containers were waste packed

Were these spills/releases cleaned up or mitigated? If so, how, and to what extent?

See above

Do you know of any additional issues, concerns, or process knowledge that could affect facility characterization?

Yes, due to the beryllium contamination in the building, the floors, walls, low ceilings, and machinery were constantly being vacuumed (wet and or dry) When I left the building, the CA and non-CA areas were Clean Clean Clean

Prepared By

Duane Parsons

Print Name

[Signature]

Signature

5/31/01

Date

**D&D RISS Facility Characterization
Historical Site Assessment - Interview Checklist**

Facility ID Tank TK25 Diesel Fuel Storage Tank (above ground)

Anticipated Facility Type (1, 2, or 3) 1

This facility specific Historical Site Assessment (HSA) - Interview Checklist has been conducted in accordance with
D&D Characterization Protocol, RFETS MAN-077-DDCP, latest version, and
Facility Disposition Program Manual, RFETS MAN-076-FDPM, latest version

Personnel Interviewed (Name, Title, and Function)

Jerry Anderson, Project Manager, D&D Buildings 865, 883, 886 clusters

What time frame did the interviewee work in the facility? What was his/her function(s)?

Jerry worked here from 2000 to 2001 as Project Manager for D&D of Buildings 865, 883, and 886 clusters

Has the building configuration changed since you worked in the building (e g , rooms & equipment)? Have there been any building renovations? If so, in what way?

No Tank supplies diesel fuel to the emergency generator in Building 827

What operations/processes were conducted in the building during the interviewee's time in the facility?

Tank supplies diesel fuel to the emergency generator in Building 827

What types of equipment were used, and where was the equipment located? (specific rooms/areas)

No equipment is associated with this tank

Were any radioactive materials or equipment handled in the building (e g , wastes, residues, product, feed material, sealed radioactive sources)? If so, what types and where?

None This tank only stored diesel fuel in it

Were there any Research & Development area (past or present) located in the facility or area? If so, where?

Yes Building 865 is an R&D building located about 50 feet to the east

Were any chemicals (e g , Beryllium, RCRA/CERCLA Constituents, PCBs, etc) handled in the building? If so, what types and where?

No, only diesel fuel was stored in the tank

**D&D RISS Facility Characterization
Historical Site Assessment - Interview Checklist**

Were there any Asbestos Containing Materials (e g , transite wall board, ceiling tiles, floor tile), lead shielding, equipment utilizing PCB oils (e g , process equipment, lifts, hydraulic systems, etc), or any other chemical hazards (past or present)?

There may be asbestos in the switchgear in the building

Did any spills or uncontrolled release of radioactive materials or chemicals occur while you worked in the building? If so, what types, quantities, and where?

None The building did not handle any radioactive material or chemicals

Were these spills/releases cleaned up or mitigated? If so, how, and to what extent?

No spills/releases needed to be cleaned up

Do you know of any additional issues, concerns, or process knowledge that could affect facility characterization?

None known of at this time

Prepared By

Dean Burton

Print Name

Signature

Date

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**D&D RISS Facility Characterization
Historical Site Assessment - Interview Checklist**

Facility ID: Tank 026 CO ₂ Deluge Tank Anticipated Facility Type (1, 2, or 3) 1 This facility specific Historical Site Assessment (HSA) - Interview Checklist has been conducted in accordance with <i>D&D Characterization Protocol</i> , RFETS MAN-077-DDCP, latest version, and <i>Facility Disposition Program Manual</i> , RFETS MAN-076-FDPM, latest version
Personnel Interviewed (Name, Title, and Function) Jerry Anderson, Project Manager , D&D of Buildings 865, 883, 886 clusters
What time frame did the interviewee work in the facility? What was his/her function(s)? Jerry worked here from 2000 to 2001 as Project Manager for D&D of Buildings 865, 883, and 886 clusters
Has the building configuration changed since you worked in the building (e g , rooms & equipment)? Have there been any building renovations? If so, in what way? No The tank was drained and locked out of service before the interviewee became associated with this tank
What operations/processes were conducted in the building during the interviewee's time in the facility? None The tank was drained and locked out of service before the interviewee became associated with this tank
What types of equipment were used, and where was the equipment located? (specific rooms/areas) The tank is cylindrical in shape approximately 15 feet long and 5 feet in diameter with a 6 ton capacity of CO ₂ located approximately 15 feet southeast of Building 865
Were any radioactive materials or equipment handled in the building (e g , wastes, residues, product, feed material, sealed radioactive sources)? If so, what types and where? No No radioactive materials or sources were stored or used near this tank
Were there any Research & Development area (past or present) located in the facility or area? If so, where? Building 865 an R&D building is located approximately 15 feet to the northwest

**D&D RISS Facility Characterization
Historical Site Assessment - Interview Checklist**

Were there any Asbestos Containing Materials (e g , transite wall board, ceiling tiles, floor tile), lead shielding, equipment utilizing PCB oils (e g , process equipment, lifts, hydraulic systems, etc), or any other chemical hazards (past or present)?

None

Did any spills or uncontrolled release of radioactive materials or chemicals occur while you worked in the building? If so, what types, quantities, and where?

None No radioactive spills occurred in the area of the tank

Were these spills/releases cleaned up or mitigated? If so, how, and to what extent?

Not applicable No radioactive spills occurred in the area of the tank

Do you know of any additional issues, concerns, or process knowledge that could affect facility characterization?

None that are known of at this time

Prepared By

Dean Burton

Print Name

Signature

Date

**D&D RISS Facility Characterization
Historical Site Assessment - Interview Checklist**

Facility ID Tank 024 Propane Tank (removed)

Anticipated Facility Type (1, 2, or 3) 1

This facility specific Historical Site Assessment (HSA) - Interview Checklist has been conducted in accordance with
D&D Characterization Protocol, RFETS MAN-077-DDCP, latest version, and
Facility Disposition Program Manual, RFETS MAN-076-FDPM, latest version

Personnel Interviewed (Name, Title, and Function)

Jerry Anderson, Project Manager, D&D Buildings 865, 883, and 886 clusters

What time frame did the interviewee work in the facility? What was his/her function(s)?

Jerry worked here from 2000 to 2001 as Project Manager for D&D of Buildings 865, 883, and 886 clusters

Has the building configuration changed since you worked in the building (e g , rooms & equipment)? Have there been any building renovations? If so, in what way?

Not applicable This tank was removed before interviewee became associated with this tank

What operations/processes were conducted in the building during the interviewee's time in the facility?

Not applicable Tank was removed before interviewee became associated with this tank

What types of equipment were used, and where was the equipment located? (specific rooms/areas)

Not applicable This tank was removed before interviewee became associated with this tank

Were any radioactive materials or equipment handled in the building (e g , wastes, residues, product, feed material, sealed radioactive sources)? If so, what types and where?

Not applicable This tank was removed before interviewee became associated with this tank

Were there any Research & Development area (past or present) located in the facility or area? If so, where?

Not applicable This tank was removed before interviewee became associated with this tank

Were any chemicals (e g , Beryllium, RCRA/CERCLA Constituents, PCBs, etc) handled in the building? If so, what types and where?

Not applicable This tank was removed before interviewee became associated with this tank

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**D&D RISS Facility Characterization
Historical Site Assessment - Interview Checklist**

<p>Were any chemicals (e g , Beryllium, RCRA/CERCLA Constituents, PCBs, etc) handled in the building? If so, what types and where? None Only CO₂ gas was stored in it</p>
<p>Were there any Asbestos Containing Materials (e g , transite wall board, ceiling tiles, floor tile), lead shielding, equipment utilizing PCB oils (e g , process equipment, lifts, hydraulic systems, etc), or any other chemical hazards (past or present)? None</p>
<p>Did any spills or uncontrolled release of radioactive materials or chemicals occur while you worked in the building? If so, what types, quantities, and where? Not applicable No radioactive materials were stored or handled near this tank</p>
<p>Were these spills/releases cleaned up or mitigated? If so, how, and to what extent? Not applicable No radioactive materials were stored or handled near this tank</p>
<p>Do you know of any additional issues, concerns, or process knowledge that could affect facility characterization? None that are known of at this time</p>

Prepared By

Dean Burton
Print Name

Dean Burton
Signature

104/19/01
Date

**D&D RISS Facility Characterization
Historical Site Assessment - Interview Checklist**

Facility ID Tank 252 Argon Tank (removed)
Anticipated Facility Type (1, 2, or 3)

This facility specific Historical Site Assessment (HSA) - Interview Checklist has been conducted in accordance with
D&D Characterization Protocol, RFETS MAN-077-DDCP, latest version, and
Facility Disposition Program Manual, RFETS MAN-076-FDPM, latest version

Personnel Interviewed (Name, Title, and Function)

Jerry Anderson, Project Manager , D&D of Buildings 865, 883, 886 clusters

What time frame did the interviewee work in the facility? What was his/her function(s)?

Jerry worked here from 2000 to 2001 as Project Manager for D&D of Buildings 865, 883, and 886 clusters

Has the building configuration changed since you worked in the building (e g , rooms & equipment)? Have there been any building renovations? If so, in what way?

Not applicable This tank was removed before interviewee became associated with this tank

What operations/processes were conducted in the building during the interviewee's time in the facility?

Not applicable This tank was removed before interviewee became associated with this tank

What types of equipment were used, and where was the equipment located? (specific rooms/areas)

Not applicable This tank was removed before interviewee became associated with this tank

Were any radioactive materials or equipment handled in the building (e g , wastes, residues, product, feed material, sealed radioactive sources)? If so, what types and where?

Not applicable This tank was removed before interviewee became associated with this tank

Were there any Research & Development area (past or present) located in the facility or area? If so, where?

Not applicable This tank was removed before interviewee became associated with this tank

Were any chemicals (e g , Beryllium, RCRA/CERCLA Constituents, PCBs, etc) handled in the building? If so, what types and where?

Not applicable This tank was removed before interviewee became associated with this tank

**D&D RISS Facility Characterization
Historical Site Assessment - Interview Checklist**

Were there any Asbestos Containing Materials (e g , transite wall board, ceiling tiles, floor tile), lead shielding, equipment utilizing PCB oils (e g , process equipment, lifts, hydraulic systems, etc), or any other chemical hazards (past or present)?

Not applicable This tank was removed before interviewee became associated with this tank

Did any spills or uncontrolled release of radioactive materials or chemicals occur while you worked in the building? If so, what types, quantities, and where?

Not applicable This tank was removed before interviewee became associated with this tank

Were these spills/releases cleaned up or mitigated? If so, how, and to what extent?

Not applicable This tank was removed before interviewee became associated with this tank

Do you know of any additional issues, concerns, or process knowledge that could affect facility characterization?

None This tank has been removed from area and is to be sold

Prepared By

Dean Burton

Print Name

Signature

Date

**D&D RISS Facility Characterization
Historical Site Assessment - Interview Checklist**

Facility ID Building 865 Metallurgical Research and Development (non Pu)
Anticipated Facility Type (1, 2, or 3) 2

This facility specific Historical Site Assessment (HSA) - Interview Checklist has been conducted in accordance with
D&D Characterization Protocol, RFETS MAN-077-DDCP, latest version, and
Facility Disposition Program Manual, RFETS MAN-076-FDPM, latest version

Personnel Interviewed (Name, Title, and Function)

Richard Link, Radiological Engineer, Building Closure Support, RISS Closure Support, PU&D Radiological Support

What time frame did the interviewee work in the facility? What was his/her function(s)?

Richard periodically worked in the Building 865 cluster from 1966 until 1985 as an RCT, Industrial Hygiene Technician and Health Physicist

Has the building configuration changed since you worked in the building (e g , rooms & equipment)? Have there been any building renovations? If so, in what way?

Richard Link has no comments or concerns

What operations/processes were conducted in the building during the interviewee's time in the facility?

Richard Link has no comments or concerns

What types of equipment were used, and where was the equipment located? (specific rooms/areas)

Richard Link has no comments or concerns

Were any radioactive materials or equipment handled in the building (e g , wastes, residues, product, feed material, sealed radioactive sources)? If so, what types and where?

Richard Link has concerns about contamination of the building due to the handling of depleted uranium Mr Link indicated that he had no concerns with beta emitters in Building 865 Mr Link did indicate that sealed sources with Cobalt 60 were used to calibrate beta detection instruments in Building 865 In addition, Mr Link noted that there is a possibility that cobalt 60 may be in the depleted uranium in the ppb level, since the depleted uranium could have come from reactors

Were there any Research & Development area (past or present) located in the facility or area? If so, where?

Richard Link has no comments or concerns

Were any chemicals (e g , Beryllium, RCRA/CERCLA Constituents, PCBs, etc) handled in the building? If so, what types and where?

Richard Link has concerns about contamination of the building due to the handling of beryllium in the building

**D&D RISS Facility Characterization
Historical Site Assessment - Interview Checklist**

Were there any Asbestos Containing Materials (e g , transite wall board, ceiling tiles, floor tile), lead shielding, equipment utilizing PCB oils (e g , process equipment, lifts, hydraulic systems, etc), or any other chemical hazards (past or present)?

Not applicable This tank was removed before interviewee became associated with this tank

Did any spills or uncontrolled release of radioactive materials or chemicals occur while you worked in the building? If so, what types, quantities, and where?

Not applicable This tank was removed before interviewee became associated with this tank

Were these spills/releases cleaned up or mitigated? If so, how, and to what extent?

Not applicable This tank was removed before interviewee became associated with this tank

Do you know of any additional issues, concerns, or process knowledge that could affect facility characterization?

Not applicable This tank was removed before interviewee became associated with this tank

Prepared By

Dean Burton

Print Name

Signature

Date

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**D&D RISS Facility Characterization
Historical Site Assessment - Interview Checklist**

Facility ID: Building 866 Liquid Waste Storage
Anticipated Facility Type (1, 2, or 3) 2

This facility specific Historical Site Assessment (HSA) - Interview Checklist has been conducted in accordance with
D&D Characterization Protocol, RFETS MAN-077-DDCP, latest version, and
Facility Disposition Program Manual, RFETS MAN-076-FDPM, latest version

Personnel Interviewed (Name, Title, and Function)

Richard Link, Radiological Engineer, Building Closure Support, RISS Closure Support, PU&D Radiological Support

What time frame did the interviewee work in the facility? What was his/her function(s)?

Richard periodically worked in Building 865 Cluster from 1966 until 1985 as an RCT, Industrial Hygiene Technician and Health Physicist

Has the building configuration changed since you worked in the building (e g , rooms & equipment)? Have there been any building renovations? If so, in what way?

Richard Link has no comments or concerns

What operations/processes were conducted in the building during the interviewee's time in the facility?

Richard Link has no comments or concerns

What types of equipment were used, and where was the equipment located? (specific rooms/areas)

Richard Link has no comments or concerns

Were any radioactive materials or equipment handled in the building (e g , wastes, residues, product, feed material, sealed radioactive sources)? If so, what types and where?

Waste solutions contaminated with low levels of depleted uranium and beryllium were transferred to the tanks in the building for eventual transfer to Buildings 774 or 374 for treatment Mr Link indicated that he had no concerns with beta emitters in Building 866 In addition, Mr Link noted that there is a possibility that cobalt 60 may be in the depleted uranium in the ppb level, since the depleted uranium could have come from reactors

Were there any Research & Development area (past or present) located in the facility or area? If so, where?

Richard Link has no comments or concerns

**D&D RISS Facility Characterization
Historical Site Assessment - Interview Checklist**

Were there any Asbestos Containing Materials (e g , transite wall board, ceiling tiles, floor tile), lead shielding, equipment utilizing PCB oils (e g , process equipment, lifts, hydraulic systems, etc), or any other chemical hazards (past or present)?

Richard Link has no comments or concerns

Did any spills or uncontrolled release of radioactive materials or chemicals occur while you worked in the building? If so, what types, quantities, and where?

Yes All operations that involved the working of depleted uranium in a form that had the potential of large quantities of oxide flaking from the surface could have caused uncontrolled releases in the area of the operation

Were these spills/releases cleaned up or mitigated? If so, how, and to what extent?

Yes they were cleaned up or mitigated using the cleaning compounds and methods to the standards of the day

Do you know of any additional issues, concerns, or process knowledge that could affect facility characterization?

Yes The beryllium and depleted uranium contamination in the high bay that might be extensive

Prepared By

Dean Burton

Print Name

Dean Burton

Signature

10/24/01

Date

**D&D RISS Facility Characterization
Historical Site Assessment - Interview Checklist**

Were any chemicals (e g , Beryllium, RCRA/CERCLA Constituents, PCBs, etc) handled in the building? If so, what types and where?

Waste solutions transferred to this building may have contained low levels of beryllium fines or chemical compounds in the tanks

Were there any Asbestos Containing Materials (e g , transite wall board, ceiling tiles, floor tile), lead shielding, equipment utilizing PCB oils (e g , process equipment, lifts, hydraulic systems, etc), or any other chemical hazards (past or present)?

Richard Link has no comments or concerns

Did any spills or uncontrolled release of radioactive materials or chemicals occur while you worked in the building? If so, what types, quantities, and where?

Yes Unknown quantities of liquid flowed out the tank vents, went onto the roof, and down to the ground

Were these spills/releases cleaned up or mitigated? If so, how, and to what extent?

Using detection instrumentation of the day, if the spills were above discharge limits, the spills were cleaned up

Do you know of any additional issues, concerns, or process knowledge that could affect facility characterization?

Yes There were tank overflows that went out of the tanks and onto the roof of the building and down onto the ground The roof and the ground around the downspout will have to be sampled for depleted uranium and beryllium The detection equipment used to clean up the spills do not meet today's standards, therefore, the ground and building might be contaminated under today's standards

Prepared By

Dean Burton
Print Name

Dean Burton
Signature

10/12/01
Date

**D&D RISS Facility Characterization
Historical Site Assessment - Interview Checklist**

Facility ID Building 867 Ventilation Exhaust Plenum (west)

Anticipated Facility Type (1, 2, or 3) 2

This facility specific Historical Site Assessment (HSA) - Interview Checklist has been conducted in accordance with
D&D Characterization Protocol, RFETS MAN-077-DDCP, latest version, and
Facility Disposition Program Manual, RFETS MAN-076-FDPM, latest version

Personnel Interviewed (Name, Title, and Function)

Richard Link, Radiological Engineer, Building Closure Support, RISS Closure Support, PU&D Radiological Support

What time frame did the interviewee work in the facility? What was his/her function(s)?

Richard periodically worked in the Building 865 Cluster from 1966 until 1985 as an RCT, Industrial Hygiene Technician and Health Physicist

Has the building configuration changed since you worked in the building (e g , rooms & equipment)? Have there been any building renovations? If so, in what way?

Richard Link has no comments or concerns

What operations/processes were conducted in the building during the interviewee's time in the facility?

Richard Link has no comments or concerns

What types of equipment were used, and where was the equipment located? (specific rooms/areas)

Richard Link has no comments or concerns

Were any radioactive materials or equipment handled in the building (e g , wastes, residues, product, feed material, sealed radioactive sources)? If so, what types and where?

The building is the air filtration building for the Building 865 system for the west side of the building and will contain low levels of depleted uranium

Were there any Research & Development area (past or present) located in the facility or area? If so, where?

Richard Link has no comments or concerns

Were any chemicals (e g , Beryllium, RCRA/CERCLA Constituents, PCBs, etc) handled in the building? If so, what types and where?

The building is the air filtration building for the Building 865 system for the west side of the building and will contain low levels of beryllium and any chemicals that could have been used in the chemical hoods on the west side of Building 865

**D&D RISS Facility Characterization
Historical Site Assessment - Interview Checklist**

Were there any Asbestos Containing Materials (e g , transite wall board, ceiling tiles, floor tile), lead shielding, equipment utilizing PCB oils (e g , process equipment, lifts, hydraulic systems, etc), or any other chemical hazards (past or present)?

Richard Link has no comments or concerns

Did any spills or uncontrolled release of radioactive materials or chemicals occur while you worked in the building? If so, what types, quantities, and where?

Spills or uncontrolled releases of depleted uranium and beryllium could have been released in the airlock during filter changes

Were these spills/releases cleaned up or mitigated? If so, how, and to what extent?

The spills were cleaned up to the standards of the day

Do you know of any additional issues, concerns, or process knowledge that could affect facility characterization?

Yes As the building is the ventilation exhaust for the high bay and its equipment it is contaminated with depleted uranium and beryllium and possibly chemicals from the hoods in the high bay

Prepared By

Dean Burton

Print Name

Signature

Date

**D&D RISS Facility Characterization
Historical Site Assessment - Interview Checklist**

Facility ID Building 868 Ventilation Exhaust (east)
Anticipated Facility Type (1, 2, or 3) 2

This facility specific Historical Site Assessment (HSA) - Interview Checklist has been conducted in accordance with
D&D Characterization Protocol, RFETS MAN-077-DDCP, latest version, and
Facility Disposition Program Manual, RFETS MAN-076-FDPM, latest version

Personnel Interviewed (Name, Title, and Function)

Richard Link, Radiological Engineer, Building Closure Support, RISS Closure Support, PU&D Radiological Support

What time frame did the interviewee work in the facility? What was his/her function(s)?

Richard periodically worked in the Building 865 Cluster from 1966 until 1985 as an RCT, Industrial Hygiene Technician and Health Physicist

Has the building configuration changed since you worked in the building (e g , rooms & equipment)? Have there been any building renovations? If so, in what way?

Richard Link has no comments or concerns

What operations/processes were conducted in the building during the interviewee's time in the facility?

Richard Link has no comments or concerns

What types of equipment were used, and where was the equipment located? (specific rooms/areas)

Richard Link has no comments or concerns

Were any radioactive materials or equipment handled in the building (e g , wastes, residues, product, feed material, sealed radioactive sources)? If so, what types and where?

The building is the air filtration building for the Building 865 system for the east side of the building and will contain low levels of depleted uranium

Were there any Research & Development area (past or present) located in the facility or area? If so, where?

Richard Link has no comments or concerns

Were any chemicals (e g , Beryllium, RCRA/CERCLA Constituents, PCBs, etc) handled in the building? If so, what types and where?

The building is the air filtration building for the Building 865 system for the east side of the building and will contain low levels of beryllium

**D&D RISS Facility Characterization
Historical Site Assessment - Interview Checklist**

Facility ID: Building 865 Metallurgical Research and Development (non Pu)
Anticipated Facility Type (1, 2, or 3) 2

This facility specific Historical Site Assessment (HSA) - Interview Checklist has been conducted in accordance with
D&D Characterization Protocol, RFETS MAN-077-DDCP, latest version, and
Facility Disposition Program Manual, RFETS MAN-076-FDPM, latest version

Personnel Interviewed (Name, Title, and Function)

Jerry Anderson, Project Manager, D&D Buildings 865, 883, and 886 clusters

What time frame did the interviewee work in the facility? What was his/her function(s)?

Jerry worked here from 2000 to 2001 as Project Manager for D&D of Buildings 865, 883, and 886 clusters

Has the building configuration changed since you worked in the building (e g , rooms & equipment)? Have there been any building renovations? If so, in what way?

Yes All metallurgical examination and testing equipment has been removed from rooms 106 and 108 All equipment used to machine metals has been removed from room 136 All casting equipment has been removed from rooms 145 and 148 The Be electrorefining cell has been removed from room 151

What operations/processes were conducted in the building during the interviewee's time in the facility?

Removal of equipment that is not ventilated by the building exhaust system

What types of equipment were used, and where was the equipment located? (specific rooms/areas)

Equipment was used to move the process equipment and machine tools into boxes and cargo containers to be sent off site for disposal Other equipment used was to decon under where items were removed

Were any radioactive materials or equipment handled in the building (e g , wastes, residues, product, feed material, sealed radioactive sources)? If so, what types and where?

No All radioactive material was removed from the building prior to the start of D&D activities There was never any pure beta emitters used in the building

Were there any Research & Development area (past or present) located in the facility or area? If so, where?

Yes Presently all R&D operations have been stopped and most equipment has been removed from the building Only the large pieces of equipment that are attached to the ventilation system are in place

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**D&D RISS Facility Characterization
Historical Site Assessment - Interview Checklist**

Were any chemicals (e g , Beryllium, RCRA/CERCLA Constituents, PCBs, etc) handled in the building? If so, what types and where?

Yes BeCl was made in room 151B, transferred to a glovebox in room 151A to be used in the Be electrorefining cell
Acids, etching chemicals, and VOCs were used in the metallurgical examination rooms 106 and 108 PCBs are in the
light ballast's in the labs and office areas There is a RCRA satellite accumulation area in room 145

Were there any Asbestos Containing Materials (e g , transite wall board, ceiling tiles, floor tile), lead shielding,
equipment utilizing PCB oils (e g , process equipment, lifts, hydraulic systems, etc), or any other chemical hazards (past
or present)?

Yes ACM is present in the floor tile and the insulation and on the steam lines and the heat treating furnaces

Did any spills or uncontrolled release of radioactive materials or chemicals occur while you worked in the building? If
so, what types, quantities, and where?

No Decontamination activities that are being preformed in the building relate to deconing of residual contamination that
was under removed equipment

Were these spills/releases cleaned up or mitigated? If so, how, and to what extent?

The areas underneath where the machining equipment sat in room 136 were decontaminated, as was the floor of the
room to the standards of the day

Do you know of any additional issues, concerns, or process knowledge that could affect facility characterization?

Yes How much contamination remains in the pits under the large equipment that remains in the building and what is the
integrity of the pits? Are there cracks in the concrete and if so has contamination migrated under the building?

Prepared By

Dean Burton
Print Name


Signature

04/19/01
Date

**D&D RISS Facility Characterization
Historical Site Assessment - Interview Checklist**

Facility ID Building 865 Metallurgical Research and Development (non Pu)
Anticipated Facility Type (1, 2, or 3) 2

This facility specific Historical Site Assessment (HSA) - Interview Checklist has been conducted in accordance with
D&D Characterization Protocol, RFETS MAN-077-DDCP, latest version, and
Facility Disposition Program Manual, RFETS MAN-076-FDPM, latest version

Personnel Interviewed (Name, Title, and Function)

James Norris, High Bay Forman, Oversaw daily operations of the high bay when the building was operational

What time frame did the interviewee work in the facility? What was his/her function(s)?

From 1970 to 1988 Oversaw the daily operations of the high bay when the building was operational

Has the building configuration changed since you worked in the building (e g , rooms & equipment)? Have there been any building renovations? If so, in what way?

Yes Classified manufacturing parts storage addition was built onto the building, Be electrorefining room was added, isostatic presses were installed in the building, the original extrusion press was removed and a new one installed, and the exhaust ventilation system was upgraded

What operations/processes were conducted in the building during the interviewee's time in the facility?

Casting of metals and alloys, forming of the cast metals and alloys into various shapes, and machining of these shapes into parts Metallurgical testing and examination of samples of work performed in the high bay and machine shop

What types of equipment were used, and where was the equipment located? (specific rooms/areas)

Casting furnaces, rolling mills, forging hammer, shears, extrusion press, swaging machines, drawing die machines, isostatic presses, heat treating furnaces, salt baths, and hydrospinning located in room 145 Be electrorefining in room 151 Machining of parts in room 136 Metallurgical examination and testing of samples in rooms 106 and 108 from operations carried out in rooms 145 and 136

Were any radioactive materials or equipment handled in the building (e g , wastes, residues, product, feed material, sealed radioactive sources)? If so, what types and where?

Depleted uranium feed ingots were used as starting material for all operations in the high bay, room 145 Depleted uranium samples were examined and tested in rooms 106 and 108

Were there any Research & Development area (past or present) located in the facility or area? If so, where?

Yes All operations conducted in the building were research and development and were conducted in rooms 136, 144, 145, 148, 151, 153, 172, 106 and 108

**D&D RISS Facility Characterization
Historical Site Assessment - Interview Checklist**

Were any chemicals (e g , Beryllium, RCRA/CERCLA Constituents, PCBs, etc) handled in the building? If so, what types and where?

Yes Be metal was cast in room 145, machined in room 136, examined metallurgically in rooms 106 and 108, and electrorefined in room 151 RCRA/CERCLA constituents are unknown PCBs are in the ballasts for the lights

Were there any Asbestos Containing Materials (e g , transite wall board, ceiling tiles, floor tile), lead shielding, equipment utilizing PCB oils (e g , process equipment, lifts, hydraulic systems, etc), or any other chemical hazards (past or present)?

Yes The floor tiles contain asbestos, the insulation on the steam lines is asbestos and the furnace insulation is asbestos
It is unknown if the hydraulic systems contain PCB One transformer for the extrusion press contains PCB

Did any spills or uncontrolled release of radioactive materials or chemicals occur while you worked in the building? If so, what types, quantities, and where?

Oxides of uranium from forming operations could have deposited on the floor and under equipment

Were these spills/releases cleaned up or mitigated? If so, how, and to what extent?

Yes, to the best extent possible using methods and cleaning solutions to the standards of the day

Do you know of any additional issues, concerns, or process knowledge that could affect facility characterization?

None that are known of at this time

Prepared By

Dean Burton

Print Name

Signature

Date

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**D&D RISS Facility Characterization
Historical Site Assessment - Interview Checklist**

Facility ID. Building 866 Liquid Waste Storage
Anticipated Facility Type (1, 2, or 3) 2

This facility specific Historical Site Assessment (HSA) - Interview Checklist has been conducted in accordance with
D&D Characterization Protocol, RFETS MAN-077-DDCP, latest version, and
Facility Disposition Program Manual, RFETS MAN-076-FDPM, latest version

Personnel Interviewed (Name, Title, and Function)

Jerry Anderson, Project Manager, D&D of Buildings 865, 883, and 886 Clusters

What time frame did the interviewee work in the facility? What was his/her function(s)?

Jerry worked here from 2000 to 2001 as Project Manager for D&D of Buildings 865, 883 and 886 Clusters

Has the building configuration changed since you worked in the building (e g , rooms & equipment)? Have there been any building renovations? If so, in what way?

Yes The two stainless steel tanks that received waste from Building 889 have been removed

What operations/processes were conducted in the building during the interviewee's time in the facility?

None The building operations have been shut down, and the remaining three tanks are RCRA empty

What types of equipment were used, and where was the equipment located? (specific rooms/areas)

The building had five waste receiving tanks and two pumps, located in its one room, for circulating the waste liquids and transferring the waste to waste processing in Buildings 774 or 374 The three tanks that remain are made of fiberglass, and the two that were removed were stainless steel

Were any radioactive materials or equipment handled in the building (e g , wastes, residues, product, feed material, sealed radioactive sources)? If so, what types and where?

Yes Depleted uranium solutions were put into the tanks No pure beta emitter wastes were ever put into the tanks

Were there any Research & Development area (past or present) located in the facility or area? If so, where?

None But Building 865, an R&D building, is located approximately 40 feet to the east

Were any chemicals (e g , Beryllium, RCRA/CERCLA Constituents, PCBs, etc) handled in the building? If so, what types and where?

Yes Be solutions were sent to the three remaining tanks in the building There could have been Be metal fines in the solutions sent to these tanks The three remaining tanks are RCRA empty but not RCRA closed

**D&D RISS Facility Characterization
Historical Site Assessment - Interview Checklist**

Were there any Asbestos Containing Materials (e g , transite wall board, ceiling tiles, floor tile), lead shielding, equipment utilizing PCB oils (e g , process equipment, lifts, hydraulic systems, etc), or any other chemical hazards (past or present)?

There could be ACM material in the insulation on the steam pipes in the building PCBs could be in the paint used to paint the building

Did any spills or uncontrolled release of radioactive materials or chemicals occur while you worked in the building? If so, what types, quantities, and where?

No, none during the interviewee's association with the building Spills may have occurred before the interviewee was associated with the building

Were these spills/releases cleaned up or mitigated? If so, how, and to what extent?

No spills/releases were cleaned up during the interviewees association with this building

Do you know of any additional issues, concerns, or process knowledge that could affect facility characterization?

Yes It is not known how or if the waste lines coming from Building 889 were sealed off when that building was taken down

Prepared By

Dean Burton

Print Name

Signature

Date

**D&D RISS Facility Characterization
Historical Site Assessment - Interview Checklist**

Facility ID Building 867 Ventilation Exhaust Plenum (west)
Anticipated Facility Type (1, 2, or 3) 2

This facility specific Historical Site Assessment (HSA) - Interview Checklist has been conducted in accordance with
D&D Characterization Protocol, RFETS MAN-077-DDCP, latest version, and
Facility Disposition Program Manual, RFETS MAN-076-FDPM, latest version

Personnel Interviewed (Name, Title, and Function)

Jerry Anderson, Project Manager, D&D of Buildings 865, 883, 886

What time frame did the interviewee work in the facility? What was his/her function(s)?

Jerry worked here from 2000 to 2001 as Project Manager for D&D of Buildings 865, 883 and 886 Clusters

Has the building configuration changed since you worked in the building (e g , rooms & equipment)? Have there been any building renovations? If so, in what way?

No The building configuration has not changed, and no renovations have been made to the building

What operations/processes were conducted in the building during the interviewee's time in the facility?

The building is the exhaust filter plenum for the general room air in the high bay, room 145, and equipment on the west side of the building

What types of equipment were used, and where was the equipment located? (specific rooms/areas)

There are two exhaust fans in the building, and they are operated such that one is always in operation. The fans are located in the fan room on the west side of the building Two HEPA filter banks filter the air exhausting Building 865

Were any radioactive materials or equipment handled in the building (e g , wastes, residues, product, feed material, sealed radioactive sources)? If so, what types and where?

Yes The HEPA filters are contaminated with depleted uranium from the air coming from Building 865 The inlet plenum and exhaust ducts leading to the plenum are contaminated There are no pure beta emitters in the plenum, as Building 865 did not handle them

Were there any Research & Development area (past or present) located in the facility or area? If so, where?

No R&D was conducted in the plenum, but it exhausted air from Building 865, which was a metallurgical R&D building

**D&D RISS Facility Characterization
Historical Site Assessment - Interview Checklist**

Were any chemicals (e g , Beryllium, RCRA/CERCLA Constituents, PCBs, etc) handled in the building? If so, what types and where?

Yes Beryllium and uranium particles were in the air exhausted from Building 865 These particles contaminated the inlet ducts, plenum and the filters The paint inside and outside the building may contain PCB

Were there any Asbestos Containing Materials (e g , transite wall board, ceiling tiles, floor tile), lead shielding, equipment utilizing PCB oils (e g , process equipment, lifts, hydraulic systems, etc), or any other chemical hazards (past or present)?

The building is posted as possibly containing asbestos

Did any spills or uncontrolled release of radioactive materials or chemicals occur while you worked in the building? If so, what types, quantities, and where?

None No spills or releases occurred while the interviewee was associated with this building

Were these spills/releases cleaned up or mitigated? If so, how, and to what extent?

No spills/releases needed to be cleaned up or mitigated during the interviewees association with this building

Do you know of any additional issues, concerns, or process knowledge that could affect facility characterization?

Yes The beryllium and depleted uranium contamination inside the plenum

Prepared By

Print Name

Signature

Date

**D&D RISS Facility Characterization
Historical Site Assessment - Interview Checklist**

Facility ID Building 868 Ventilation Exhaust Plenum (east)

Anticipated Facility Type (1, 2, or 3) 2

This facility specific Historical Site Assessment (HSA) - Interview Checklist has been conducted in accordance with
D&D Characterization Protocol, RFETS MAN-077-DDCP, latest version, and
Facility Disposition Program Manual, RFETS MAN-076-FDPM, latest version

Personnel Interviewed (Name, Title, and Function)

Jerry Anderson, Project Manager, D&D of Buildings 865, 883, 886

What time frame did the interviewee work in the facility? What was his/her function(s)?

Jerry worked here from 2000 to 2001 as Project Manager for D&D of Buildings 865, 883 and 886 Clusters

Has the building configuration changed since you worked in the building (e g , rooms & equipment)? Have there been any building renovations? If so, in what way?

No The building configuration has not changed, and no renovations have been made to the building

What operations/processes were conducted in the building during the interviewee's time in the facility?

The building is the exhaust filter plenum for equipment in the high bay, room 145, and the machine shop, room 136, of the building

What types of equipment were used, and where was the equipment located? (specific rooms/areas)

The building is the exhaust filter plenum for equipment in the machine shop and the center and east side of the high bay of Building 865

Were any radioactive materials or equipment handled in the building (e g , wastes, residues, product, feed material, sealed radioactive sources)? If so, what types and where?

Yes The HEPA filters are contaminated with depleted uranium from the air coming from Building 865 The inlet plenum and exhaust ducts leading to the plenum are contaminated There are no pure beta emitters in the plenum, as Building 865 did not handle them

Were there any Research & Development area (past or present) located in the facility or area? If so, where?

No R&D was conducted in the plenum, but it exhausted air from Building 865, which was a metallurgical R&D building

**D&D RISS Facility Characterization
Historical Site Assessment - Interview Checklist**

Were any chemicals (e g , Beryllium, RCRA/CERCLA Constituents, PCBs, etc) handled in the building? If so, what types and where?

Yes Beryllium particles were in the air exhausted from Building 865 These particles contaminated the inlet ducts, plenum and the filters The paint inside and outside the building may contain PCBs

Were there any Asbestos Containing Materials (e g , transite wall board, ceiling tiles, floor tile), lead shielding, equipment utilizing PCB oils (e g , process equipment, lifts, hydraulic systems, etc), or any other chemical hazards (past or present)?

The building is posted as possibly containing asbestos

Did any spills or uncontrolled release of radioactive materials or chemicals occur while you worked in the building? If so, what types, quantities, and where?

None No spills or releases occurred while the interviewee was associated with this building

Were these spills/releases cleaned up or mitigated? If so, how, and to what extent?

No spills/releases needed to be cleaned up or mitigated during the interviewees association with this building

Do you know of any additional issues, concerns, or process knowledge that could affect facility characterization?

Yes The beryllium and depleted uranium contamination inside the plenum

Prepared By

Print Name

Signature

Date

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**D&D RISS Facility Characterization
Historical Site Assessment - Interview Checklist**

Facility ID. Building 827 Emergency Generator
Anticipated Facility Type (1, 2, or 3) 1

This facility specific Historical Site Assessment (HSA) - Interview Checklist has been conducted in accordance with
D&D Characterization Protocol, RFETS MAN-077-DDCP, latest version, and
Facility Disposition Program Manual, RFETS MAN-076-FDPM, latest version

Personnel Interviewed (Name, Title, and Function)

Jerry Anderson, Project Manager, D&D of Buildings 865, 883, 886 clusters

What time frame did the interviewee work in the facility? What was his/her function(s)?

Jerry worked here from 2000 to 2001 as Project Manager for D&D of Buildings 865, 883, and 886 clusters

Has the building configuration changed since you worked in the building (e g , rooms & equipment)? Have there been any building renovations? If so, in what way?

None The building configuration has not changed and no renovations have been made to the building

What operations/processes were conducted in the building during the interviewee's time in the facility?

Building supplies emergency power to Buildings 865, 883, and 886

What types of equipment were used, and where was the equipment located? (specific rooms/areas)

One diesel driven electric generator and necessary switchgear to operate the equipment if it did not start automatically

Were any radioactive materials or equipment handled in the building (e g , wastes, residues, product, feed material, sealed radioactive sources)? If so, what types and where?

Not during the interviewees association with the building

Were there any Research & Development area (past or present) located in the facility or area? If so, where?

None R&D activities were conducted in building 865 approximately 40 feet to the east of Building 827

Were any chemicals (e g , Beryllium, RCRA/CERCLA Constituents, PCBs, etc) handled in the building? If so, what types and where?

PCBs could be in the paint on the building Battery acid and used lead batteries were handled in the building

**D&D RISS Facility Characterization
Historical Site Assessment - Interview Checklist**

Were there any Asbestos Containing Materials (e g , transite wall board, ceiling tiles, floor tile), lead shielding, equipment utilizing PCB oils (e g , process equipment, lifts, hydraulic systems, etc), or any other chemical hazards (past or present)?

There may be ACM in the insulation on the exhaust system from the diesel engine

Did any spills or uncontrolled release of radioactive materials or chemicals occur while you worked in the building? If so, what types, quantities, and where?

None There were no spills or releases in this building as it did not handle radioactive material or chemicals

Were these spills/releases cleaned up or mitigated? If so, how, and to what extent?

There were no spills/releases in this building

Do you know of any additional issues, concerns, or process knowledge that could affect facility characterization?

The concrete floor of the building was not painted and has become heavily stained with diesel fuel and motor oil

Prepared By

Dean Burton

Print Name

Signature

Date

**D&D RISS Facility Characterization
Historical Site Assessment - Interview Checklist**

Facility ID Building C865 Cooling Tower
Anticipated Facility Type (1, 2, or 3) 1

This facility specific Historical Site Assessment (HSA) - Interview Checklist has been conducted in accordance with
D&D Characterization Protocol, RFETS MAN-077-DDCP, latest version, and
Facility Disposition Program Manual, RFETS MAN-076-FDPM, latest version

Personnel Interviewed (Name, Title, and Function)

Jerry Anderson, Project Manager, D&D of Buildings 865, 883, 886 clusters

What time frame did the interviewee work in the facility? What was his/her function(s)?

Jerry worked here from 2000 to 2001 as Project Manager for D&D of Buildings 865, 883, and 886 clusters

Has the building configuration changed since you worked in the building (e g , rooms & equipment)? Have there been any building renovations? If so, in what way?

No

What operations/processes were conducted in the building during the interviewee's time in the facility?

The cooling tower is out of service

What types of equipment were used, and where was the equipment located? (specific rooms/areas)

A fan is situated on top of the tower for inducing a draft up through the tower for cooling the tower water. The tower water was circulated through the tower to a heat exchanger in Building 865 by an electric pump located north of the tower. The tower is located about 10 feet west of Building 865.

Were any radioactive materials or equipment handled in the building (e g , wastes, residues, product, feed material, sealed radioactive sources)? If so, what types and where?

No. No radioactive materials were used or stored near the cooling tower.

Were there any Research & Development area (past or present) located in the facility or area? If so, where?

No R&D done in this facility but Building 865 was an R&D facility.

Were any chemicals (e g , Beryllium, RCRA/CERCLA Constituents, PCBs, etc) handled in the building? If so, what types and where?

Yes. Until 1992 chemicals were added to the water to control the pH and algae growth. Residual amounts may be in the water in the tower. What chemicals were used is unknown.

**D&D RISS Facility Characterization
Historical Site Assessment - Interview Checklist**

Were there any Asbestos Containing Materials (e g , transite wall board, ceiling tiles, floor tile), lead shielding, equipment utilizing PCB oils (e g , process equipment, lifts, hydraulic systems, etc), or any other chemical hazards (past or present)?

Yes, Transite was used in the construction of the end panels and louvers of the tower No PCBs are in the tower

Did any spills or uncontrolled release of radioactive materials or chemicals occur while you worked in the building? If so, what types, quantities, and where?

None at the cooling tower but spills occurred at Building 866, which is 20 feet to the north

Were these spills/releases cleaned up or mitigated? If so, how, and to what extent?

Not applicable No spills/releases were cleaned up during the interviewees association with this building

Do you know of any additional issues, concerns, or process knowledge that could affect facility characterization?

None that are known of at this time

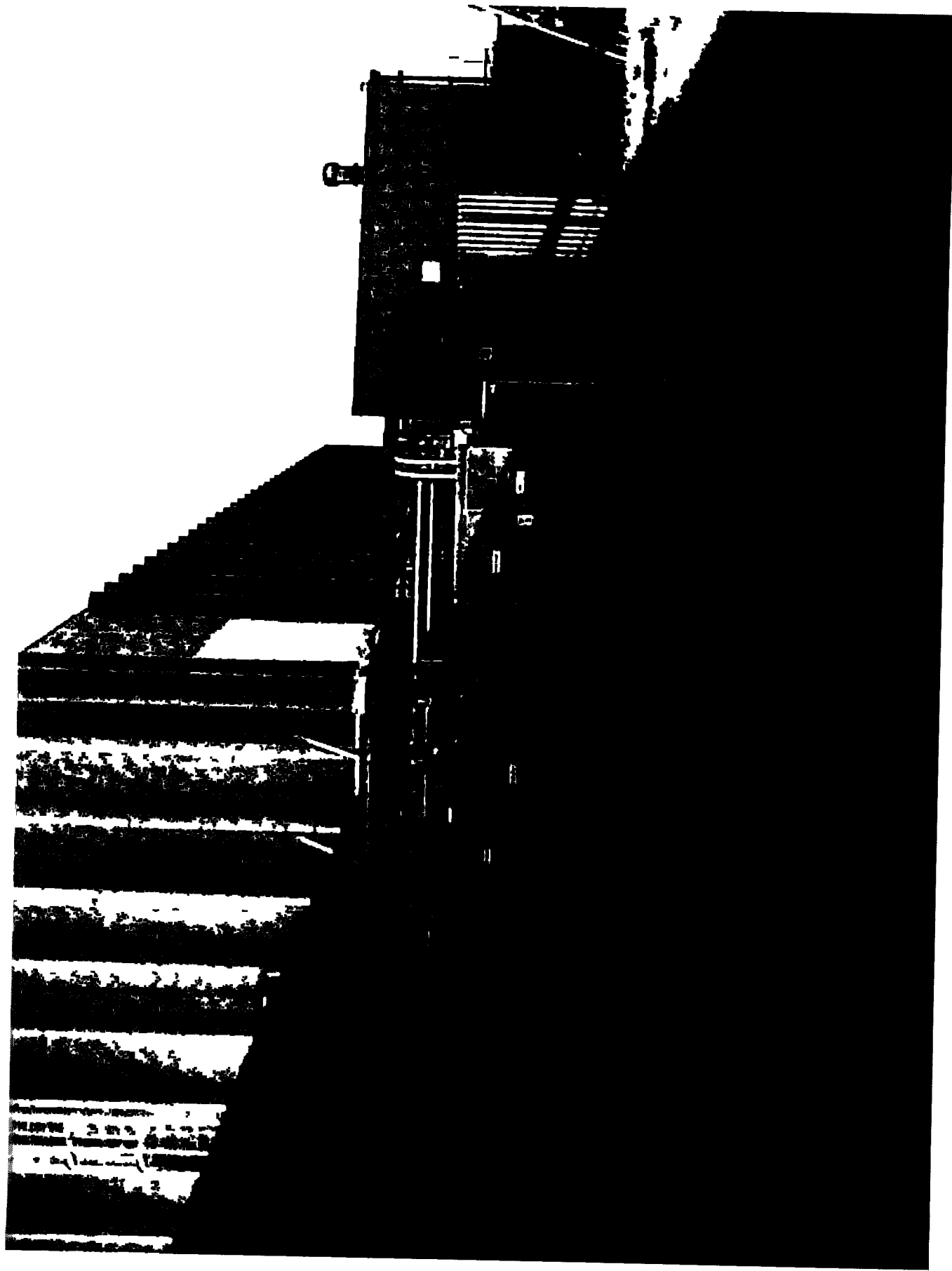
Prepared By

Dean Burton

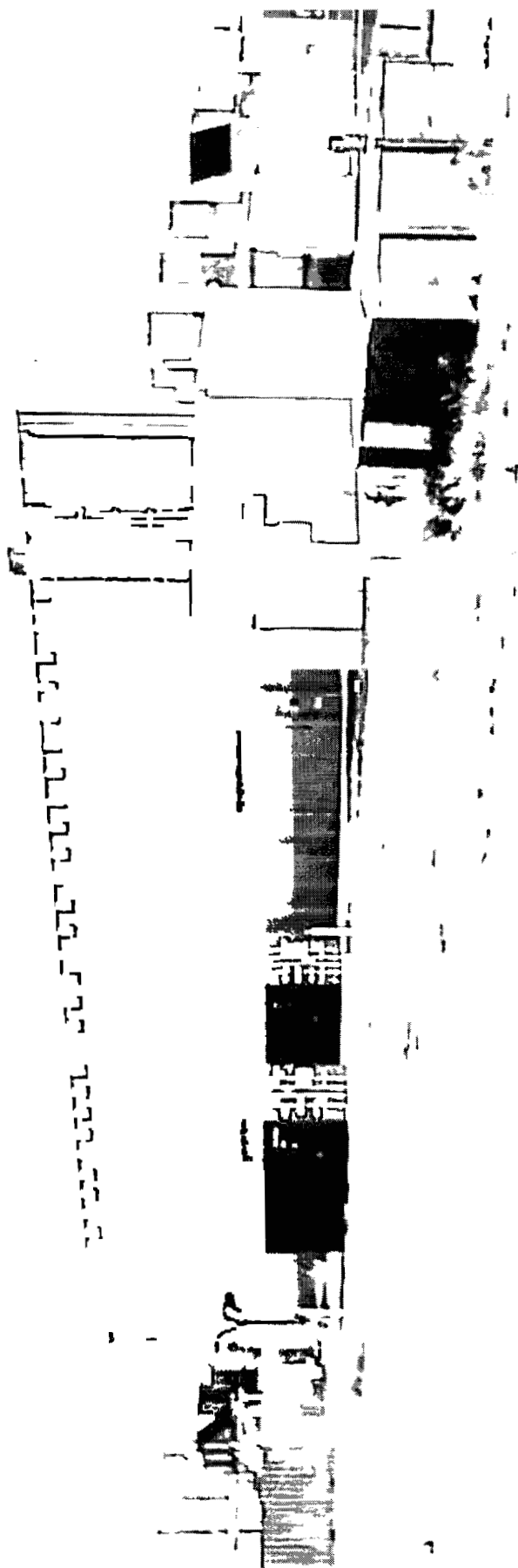
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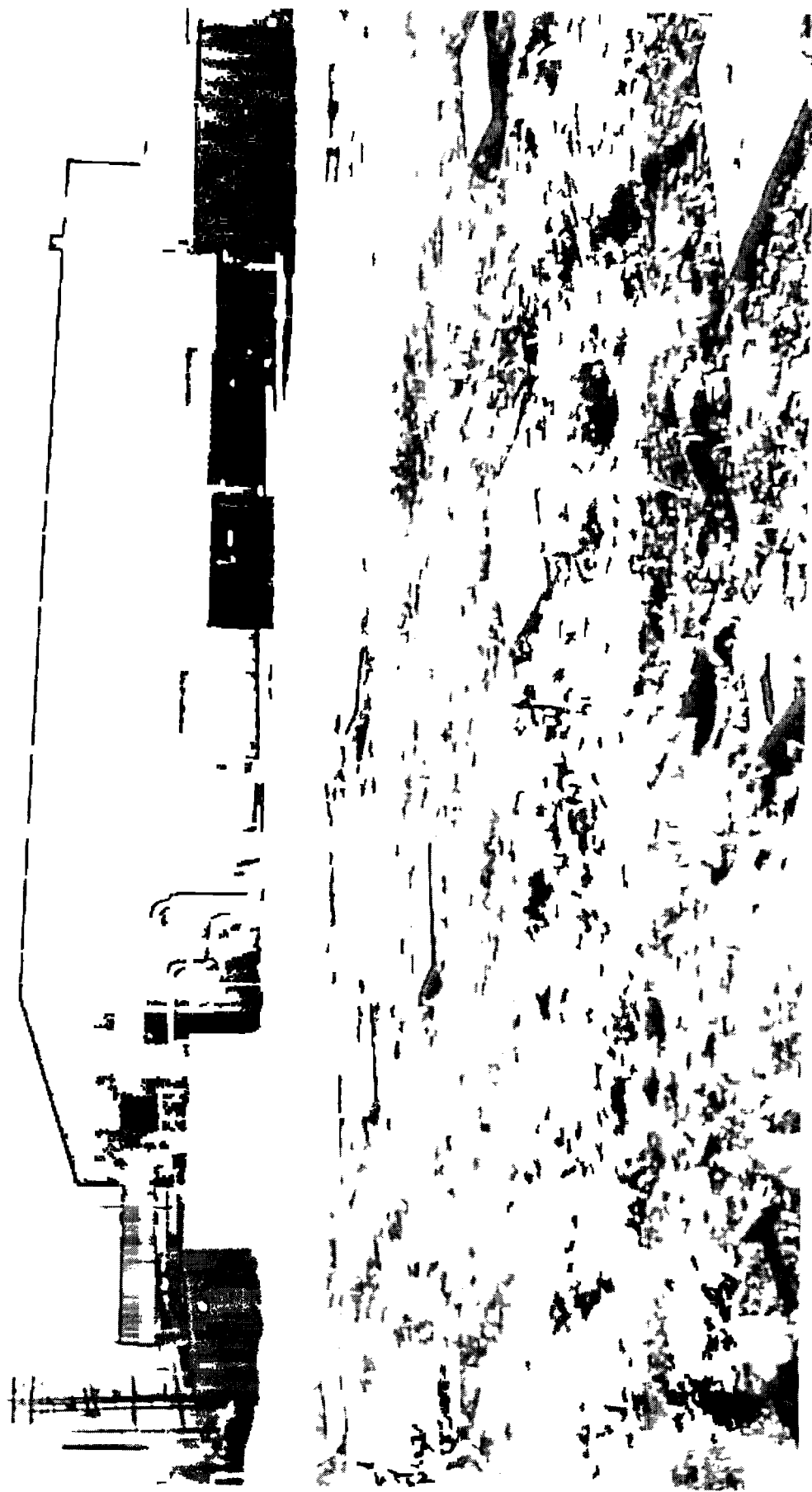
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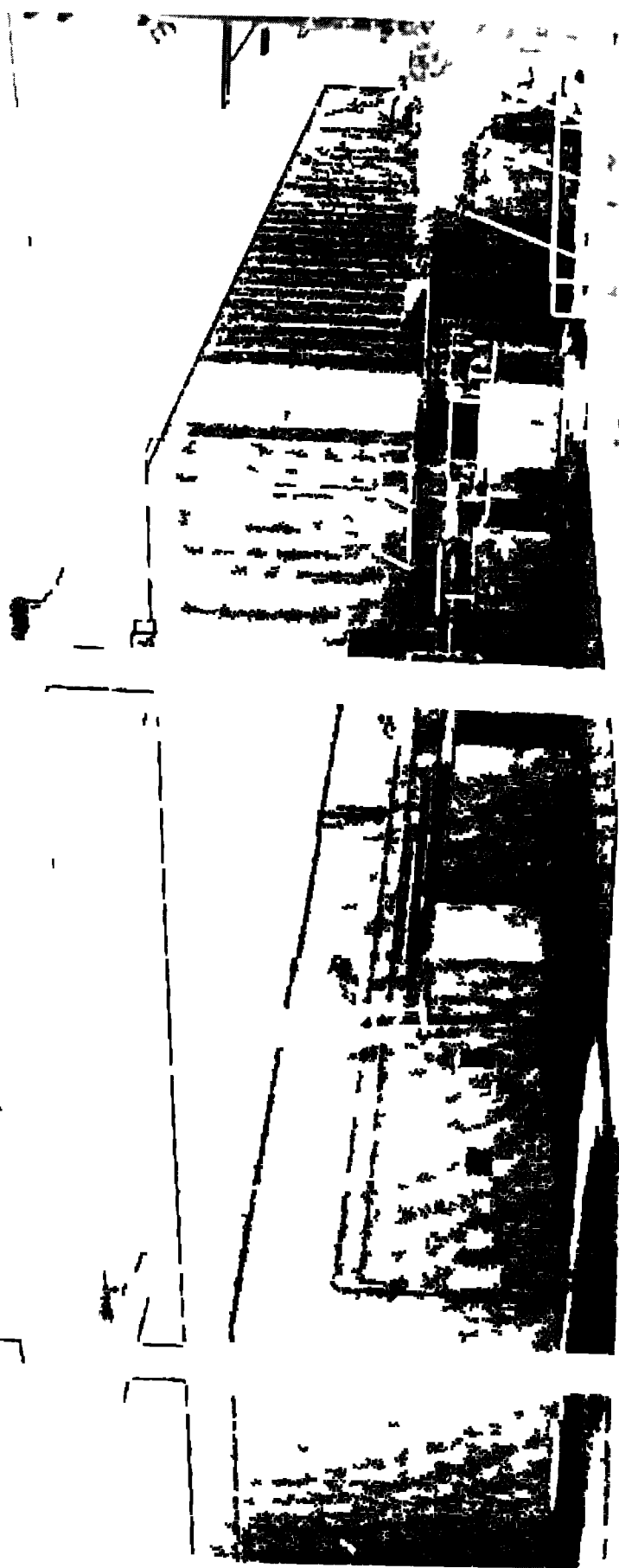


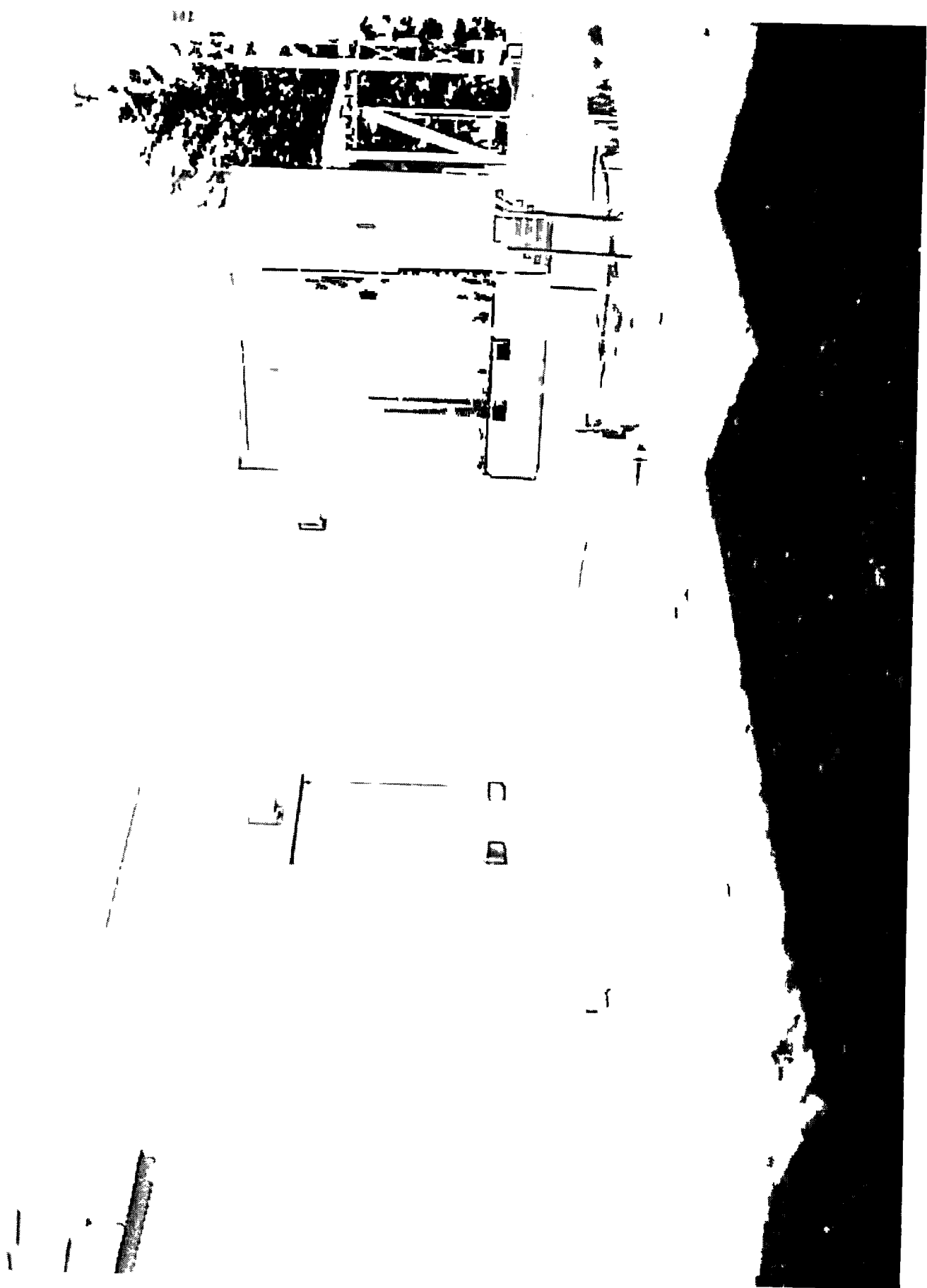




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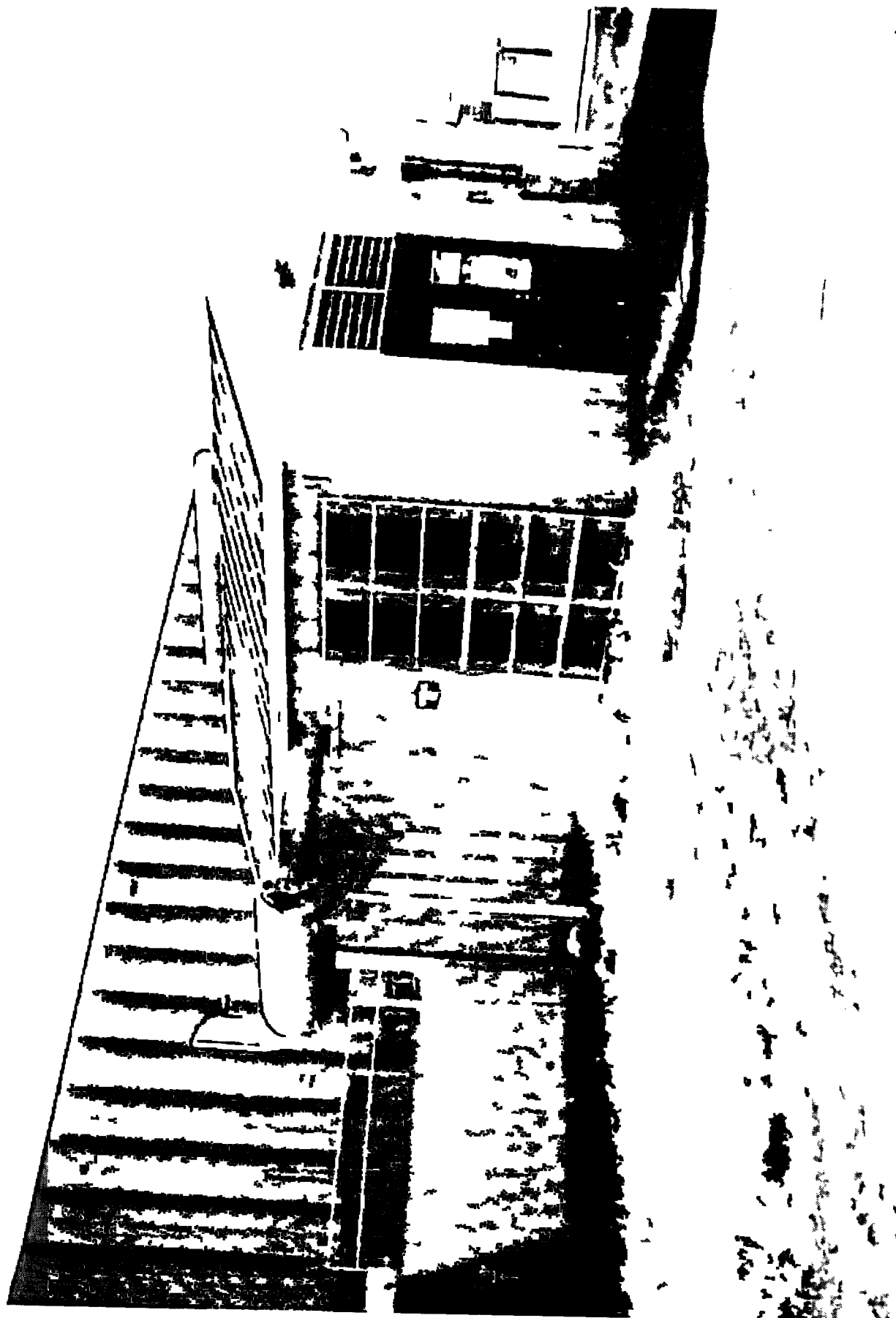


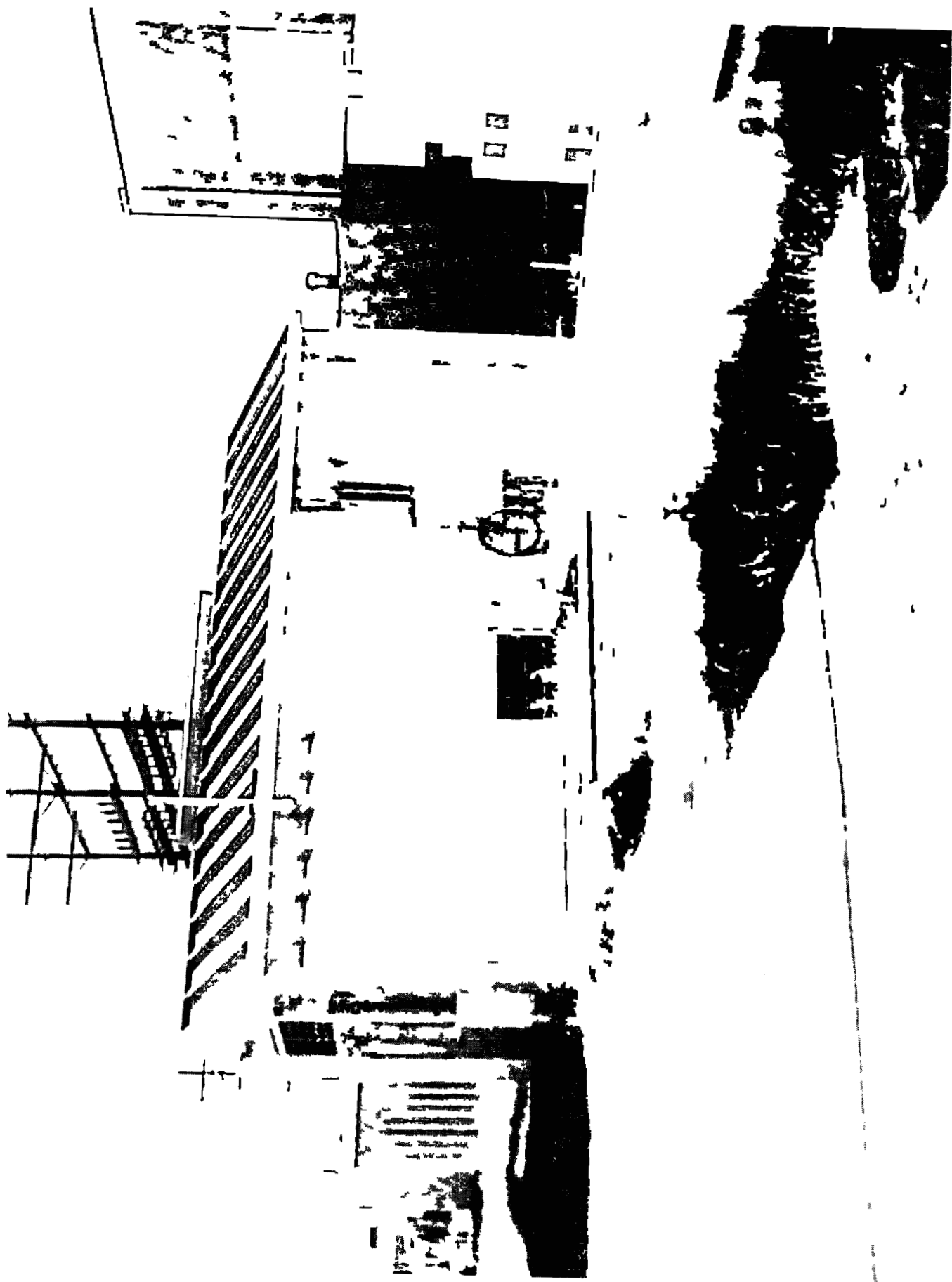


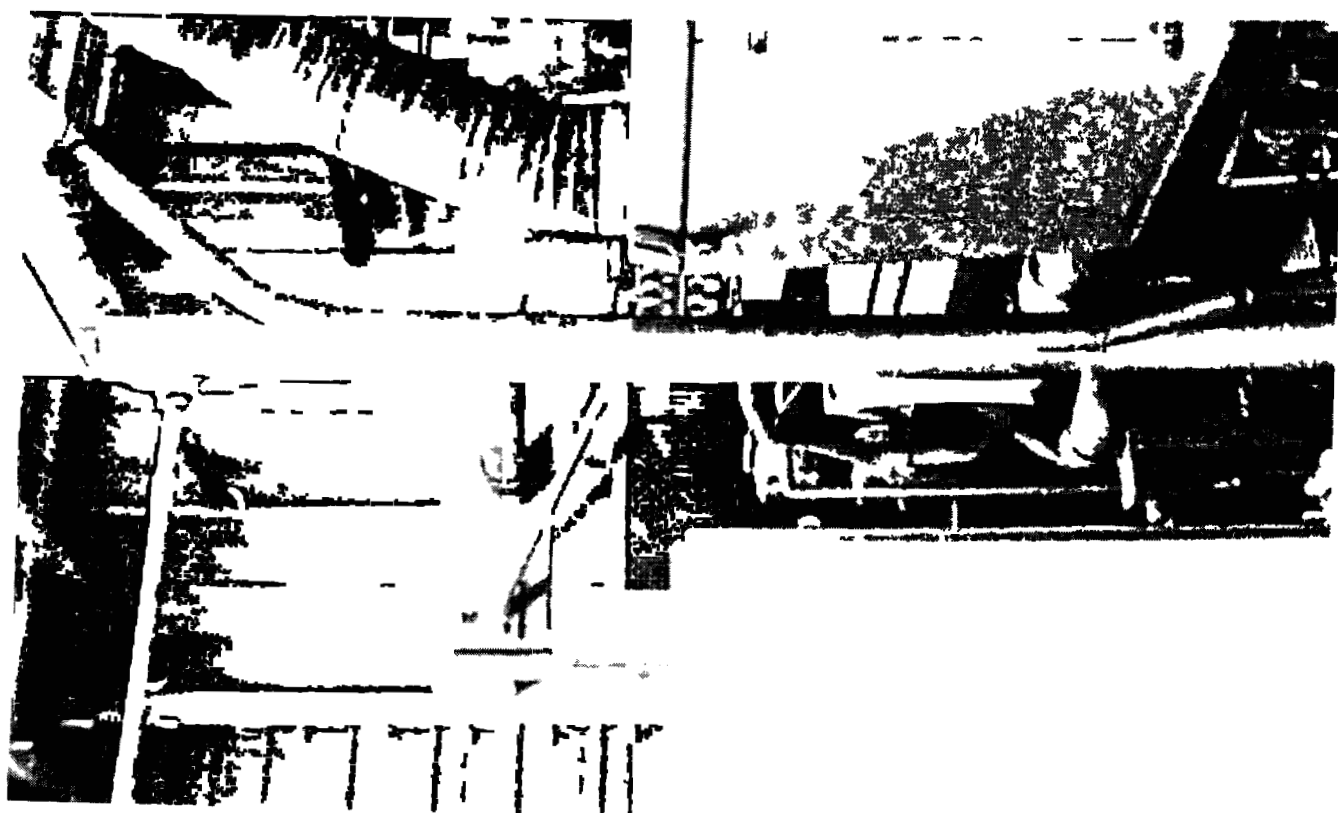
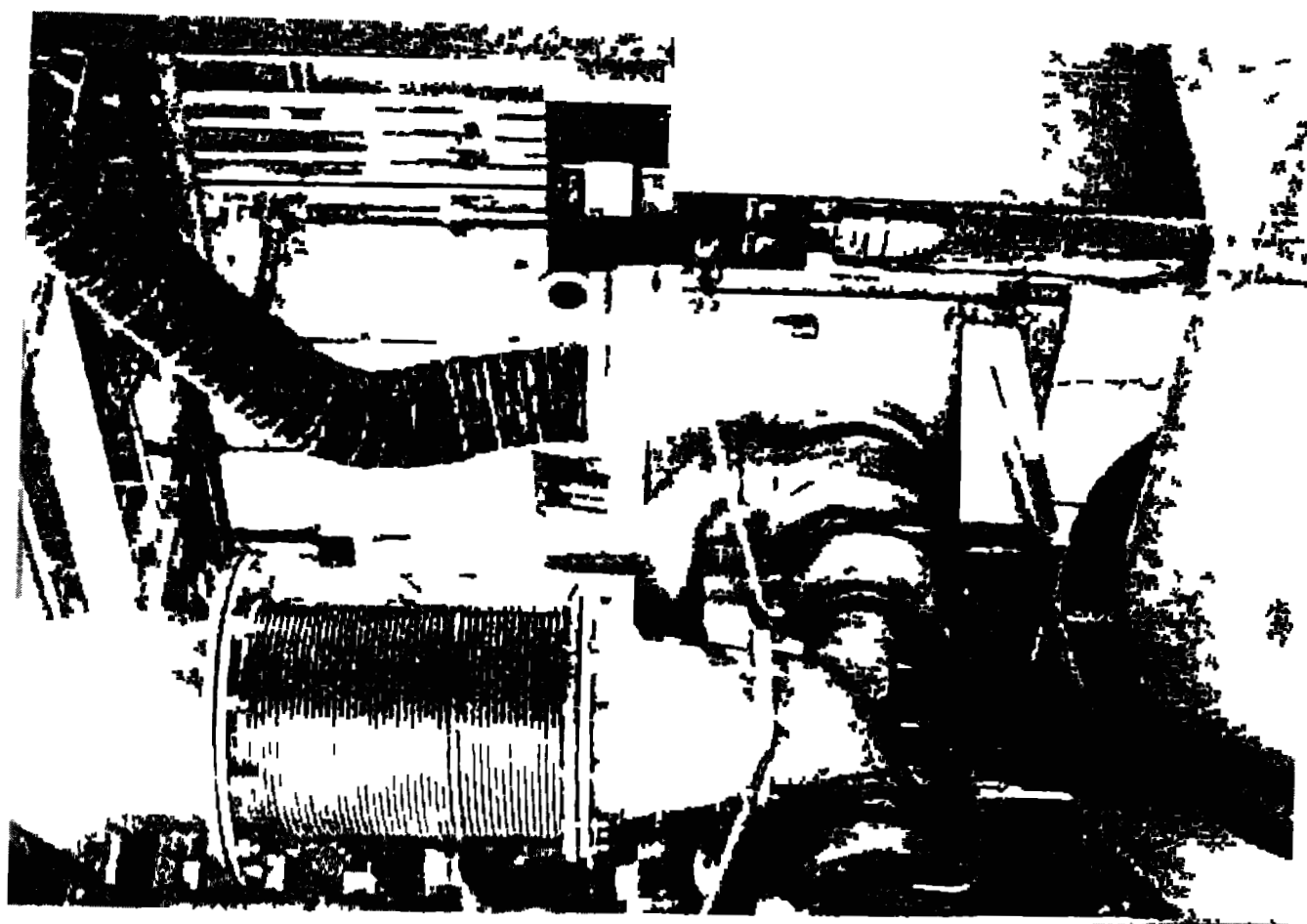






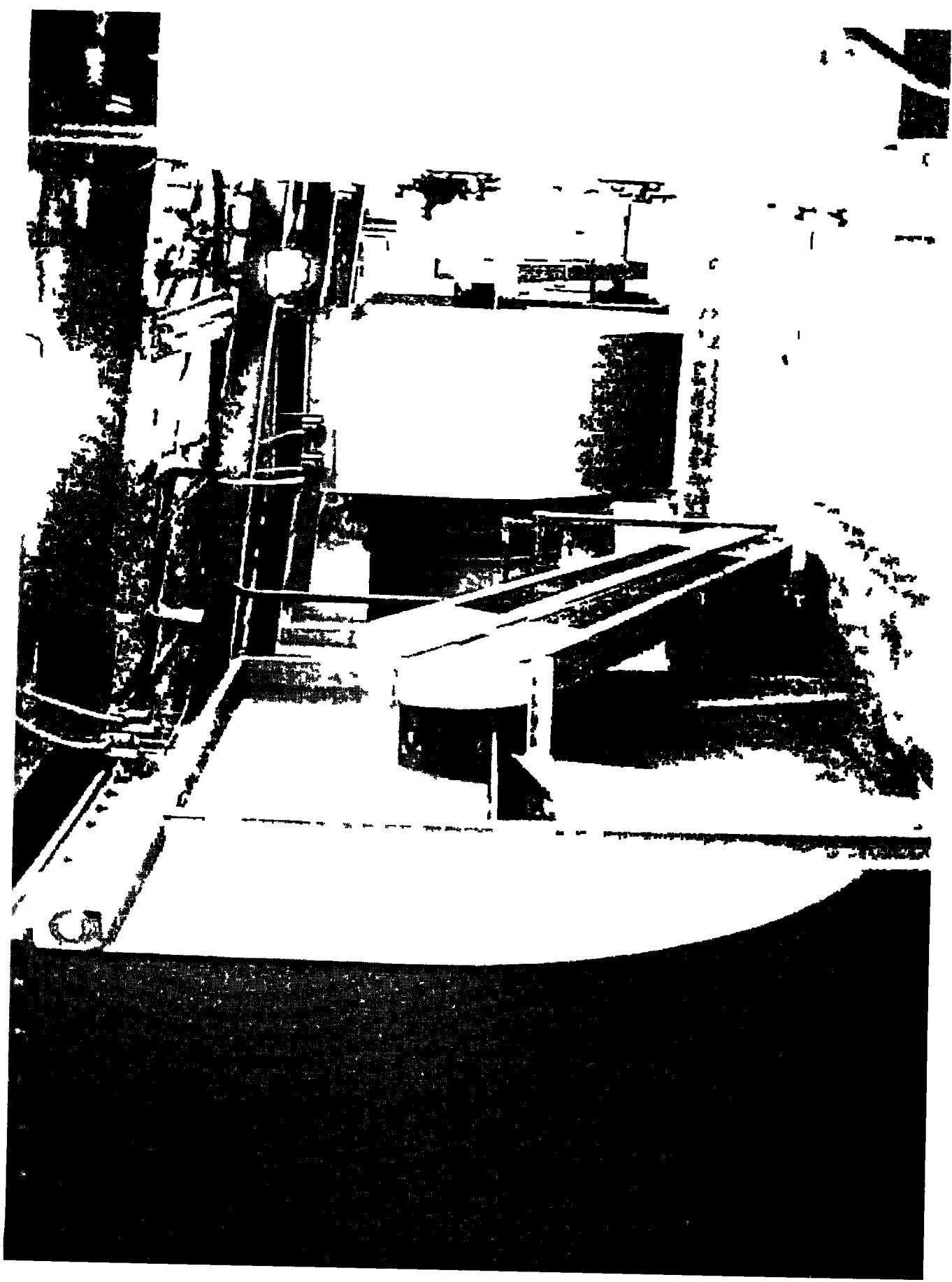




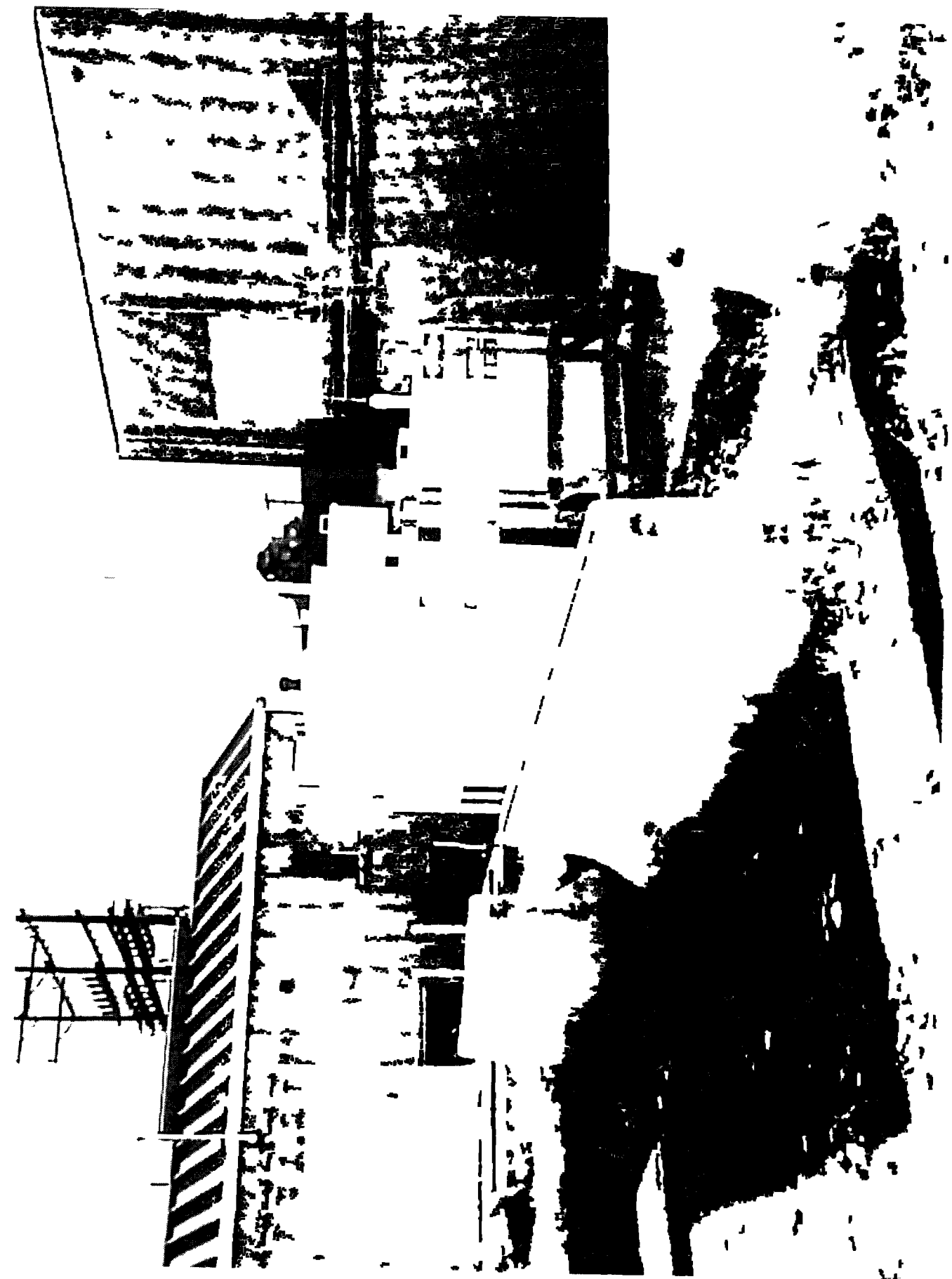




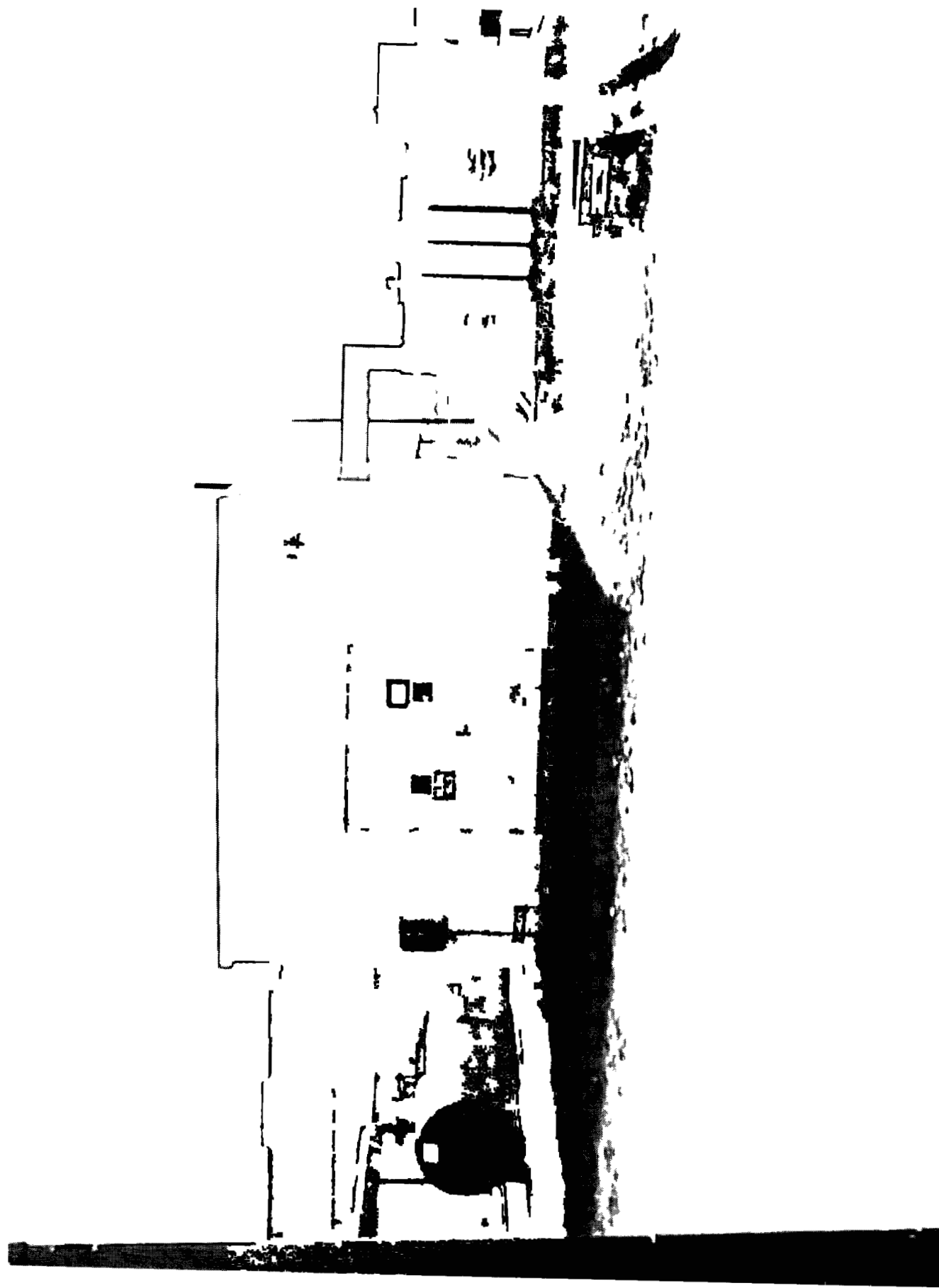




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